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TECHNICAL REPORT
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ARTHROPODS OF MEDICAL IMPORTANCE
IN AUSTRALIA AND THE PACIFIC ISLANDS

by

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FOREWORD

This report is one of the end-products of a series of studies that began in 1952 when the Office of The Quartermaster General awarded a contract to Cornell University for summarization of distributional data for insects and other arthropods of medical importance. The studies were planned in cooperation with personnel of the Office of the Surgeon General and the U. S. Department of Agriculture. Dr. Bernard V. Travis, Professor of Medical Entomology and Parasitology at Cornell University, has been the principal investigator since the inception of the series. A thorough search was made of the entomological literature, and for each country and major geographical region of the world a "summary report" was prepared, listing the reported occurrences and habitat data for medically important arthropods. These summary reports were placed on file at the Natick Laboratories and the Military Entomology Information Service, Walter Reed Army Medical Center, Washington, D. C., where they are available for loan and reference.

By 1964 it became evident that changes in the field of entomology--both in knowledge acquired and in the distributions of some species--required updating of the material contained in the country summary reports. It was decided also that the material would be more useful if consolidated on a continental rather than a country basis. Contracts were let with Cornell University for accomplishing these two tasks simultaneously, and the present report for Australia and the Pacific Islands is the fourth report resulting from this work. It will be followed by similar studies for North America and Europe.

The distributions of the most important species have been mapped by the University of Pittsburgh's Department of Geography. The maps will be published in an Atlas of Medically Important Arthropods, to supplement this and the other continental summaries.

The contract under which this work was accomplished was supported by funds from the Office of the Chief of Research and Development, Department of the Army. This contract was monitored by Dr. William C. Robison, Chief of the Geography Division, Earth Sciences Laboratory. Dr. John J. Pratt, Jr., Head of the Applied Entomology Group, Pioneering Research Laboratory, was alternate project officer.

The following members of the staff at Cornell University assisted the authors in preparing this compilation: Eveline H. Aron, Editha G. Gagni, Isabel Valiela, Erika F. Zeballos and Ruth E. een, Librarian, Department of Entomology. Priscilla R. Lawrence typed the manuscript.

The Earth Sciences Division is pleased to be able to present the results of the labors of Dr. Travis and his co-workers for the use of Army specialists in preventive medicine, public health officers, and entomologists.

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ABSTRACT

The occurrence of insects and other arthropods of medical importance in Australia, New Zealand, New Guinea, and the islands of Oceania is summarized on the basis of a review of most of the available references in the scientific literature. The report includes, for each major group of arthropods, a listing of species and subspecies with biological and distributional data, tabulations of diseases or disease organisms transmitted, and literature citations.

The groups of arthropods included, with the number of species or subspecies in parentheses, are:

Mosquitoes (828), Black flies (58), Sand flies (6), Midges (44), Horse flies (750), Biting flies (7), Non-biting flies (9), Fleas (88), Bugs (2), Urticating and vesicating arthropods (13), Ticks (108), Mites (69), and Miscellaneous arthropods (18).

ARTHROPODS OF MEDICAL IMPORTANCE IN AUSTRALIA AND THE PACIFIC ISLANDS

INTRODUCTION

1. Format of this report

As will be seen from the Abstract and the Table of Contents, the data in this report are presented according to arthropod groups.

For each arthropod group the data are presented in tables, one or two as required. In Table 1, which is the basic table for each arthropod group, are listed the arthropods, biological data, distribution, and documentary references. In Table 2 are summarized the disease organisms said by the authors to be transmitted by the arthropods.

After the above-mentioned tabular material there is, for each arthropod group, a section of Literature Cited, containing the complete citation referred to in the basic table (Table 1). The number of citations used to document the recorded data was reduced to the minimum so that for each fact recorded, there is only one reference cited. Thus the references used constitute only a very small portion of those reviewed for the regional report.

The format of the data sections of the report is explained below. At the end of this Introduction there are brief explanatory comments on synonymy, interpretation of statements, and the order of listings for any particular species in Table 1.

2. Table 1 explained

For each group of arthropods (mosquitoes, black flies, etc.) its basic table, Table 1, lists for each species and subspecies the distribution (island or islands), together with any biological data, and the reference documenting each entry. We will explain this table by considering entries under each column heading in turn.

a. SPECIES

Under the first heading, SPECIES, is entered: genus, species, subspecies (if any), and describer.

The format for a typical entry under SPECIES is somewhat variable, depending on the information available for each arthropod group. Typically, the genera and species are listed in alphabetical order in each group. No entries are made for subgenera. However, the subspecies, varieties and forms are listed as they appear in the publications. The describer's name is given unless the author has not listed the name and it is not clear from the literature what the describer's name should be.

See note on synonymy in this Introduction under "5. Special comments."

b. BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION

The basic data of Table 1 are presented under these headings. The entries in the table are made in the same order as the heading indicates, and are separated by the same punctuation mark, ":". "No data" is indicated "---"; that is, there may be no data on BREEDING HABITATS or ADULT ACTIVITY. Under DISTRIBUTION, the third category of information, a number is entered; this number represents an island or islands, which may be identified by consulting the Index of Islands immediately following this Introduction.

For example, the entry for the second item on page 2 (---;---32) means that there are no data on BREEDING HABITATS or ADULT ACTIVITY for Australia (number 32 under DISTRIBUTION, as identified in the Index of Islands) for the particular species, although the indicated reference (Edwards, 1924) shows the species occurs there.

Further comments on each part of this heading follow:

BREEDING HABITS: No entry is made (as indicated by "----") unless the author makes clear and specific statements. The data concerning the biology of the immature forms are quite sparse, except for mosquitoes.

ADULT ACTIVITY: Again, no entry is made (as indicated by "----") unless the author makes clear and specific statements. Except for mosquitoes, the authors present little biological data for adult arthropods.

DISTRIBUTION: As indicated by the heading, the third category of information is DISTRIBUTION and the entry in the table consists of one or more numbers. These numbers represent an island or islands as indicated above and may be identified by referring to the Index of Islands. All entries in this report use these numbers (in the DISTRIBUTION column of both Table 1 and Table 2) instead of the island name. For example, 32 is the number for Australia. Where the authors have not recorded a specific island, an inclusive number is used. For example, 205 is the number for Micronesia. For explanation of symbols attached to the island numbers in this column, see paragraph c immediately below.

c. Symbols attached to the island number or to a reference date

In the DISTRIBUTION column, the island number may have a symbol attached to it, e.g., 32* or 32^o. In the DATE column, the date may have a symbol attached to it, e.g., 1913

Symbol * after an island number indicates that the species is said by the author to transmit a disease organism to man. For example, on page 2 of this report, the third entry ends with ". . . 32*". This means that the species in Australia (island 32 in Index) are said to transmit a disease organism to man. When this symbol is used, the species of arthropod and the disease transmitted are entered in the table immediately following; that is, such entries in Table 1 are summarized in Table 2. Where two asterisks (***) appear, they refer to two separate diseases.

Symbol o after the island number indicates that the species is said by the author either to bite or directly annoy man. For example, on page 2 of this report the first entry ends ". . . 32^o". This means that this particular species in Australia (island 32 in the Index) is said by the author to either bite or annoy man. These entries are not summarized, as are those marked "*" (see paragraph above).

Symbol + after a reference date indicates that the record is an unconfirmed entry. For example, on page 201 of this report the 5th listing ends under DATE ". . . 1926". This means that the particular entry "----;----; 32,222," (country 32 is Australia and 222 is New Zealand in the Index of Islands) needs further confirmation. This symbol is also used in Table 2, with the same meaning, but it is there attached to the island number in the DISTRIBUTION column. See paragraph 3 below.

d. (GENERAL STATEMENTS)

In addition to the three main categories of information as described above, the column heading indicates that there may be general statements. If so, this entry is made after those of the three main categories and is enclosed in parentheses, exactly as the column heading indicates. This may be a statement for either the various islands or countries or for the various species. For example, on page 2 of this report, the last listing ends ". . . (Vecto. of dengue)". On page 7, the first listing ends ". . . (Tree holes and bamboo)".

e. AUTHOR and DATE

Every entry in Table 1 is documented by an author (or a senior author) and date of publication. The AUTHOR and DATE (year of publication) are entered in the last two columns of Table 1. Explanation of symbol "*" which may be attached to DATE is given in paragraph c above. (The complete literature citation is given, for each arthropod group, in the section immediately following the tables.)

3. Table 2 explained

As noted above in paragraph 2c, all listings marked "*" in a table are summarized for the particular species of arthropod, in the table immediately following, giving the island or islands where occurring, and the disease or disease organism transmitted.

Table 2 summarizes such items for Table 1. For example, on page 2 of this report (Mosquitoes, Table 1) the third entry ends "... 32*". We note on this page and on page 3, under the same species, other listings ending : 97*, 107*, 134*, 219*, 220*, 283*. All these listings are summarized at the beginning of Table 2, page 104. Besides the SPECIES and the DISTRIBUTION, the table also gives information on DISEASE ORGANISM. Countries in these columns are discussed below.

a. SPECIES and DISTRIBUTION

The SPECIES is, of course, that indicated in Table 1, and the DISTRIBUTION column summarizes all the numbers (i.e., islands that are marked "*" under DISTRIBUTION in Table 1 for this particular species).

b. DISEASE OR DISEASE ORGANISM

Under this heading there are four subheadings (VIRUS & RICKETTSIA; PROTOZOA; HELMINTHS; OTHER). The subheading itself may be broken down, where necessary. For example, on page 104 (Mosquitoes, Table 2), the first subcolumn (VIRUS & RICKETTSIA) is broken down as: Dengue and Yellow fever, with numbers indicating the appropriate distribution.

4. Literature Cited section explained

At the end of each arthropod section there is a complete list of Literature Cited, as referred to in the last column of Table 1 (AUTHOR and DATE).

The abbreviations of the publications follow the World List of Scientific Periodicals.

5. Special comments

a. A note on synonymy

The problem of attempting to straighten out synonymy of scientific names is beyond the scope of this report. Except for a few species, the scientific names, as used by the authors, are entered in the tables. In a few cases we have followed the synonymy of an acceptable monograph. As there is no universal agreement among taxonomists, the responsibility for synonymy must be referred to the interpretation of each specialist.

b. A note on interpretation of statements

An attempt has been made to avoid interpreting the published statements. This has been found difficult in matters concerning disease transmission; thus it is often clearer if we use the author's own words. In general, it has been found that few authors make unqualified statements concerning the vectors. Also, as one might expect, most of the statements are based on epidemiological evidence and not on actual transmissions.

c. Order of listings for same species in Table 1

If there is more than one island number for a single entry, the numbers are arranged in ascending order. For example, on page 2 the 8th listing for DISTRIBUTION reads: "32, 50, 83, 107, 114,...314."

When there is more than one entry (that is, citation with Author and Date) under a single species and describer, the various entries are listed in ascending order of island number, based on the first (lowest, as explained above) number for each entry. For example, on page 2, under *Aedes aegypti* (Linnaeus), the first 5 listings are 32; the next listing starts with 32 and continues, 50, 83, etc. through 314. The next listing is 50. The next listing begins with 66, and so on.

INDEX OF ISLANDS

In 1962 a world-wide Geographic Index was published* listing countries, islands, and major regions in alphabetical order, and assigning to each a number. The following list consolidates the islands of the Pacific area included in this report, as shown on the adjacent map. This report covers Australia, New Zealand, New Guinea, and all the islands of the central and south Pacific known as Oceania. This includes the islands comprising the State of Hawaii. All other islands of the South Pacific (such as those of Indonesia, the Galapagos Islands, and the islands in the vicinity of Antarctica) are included in the reports for Asia or Latin America.

Only a few of the islands or island groups of the Pacific are also independent countries. The present list comprises New Zealand, Western Samoa, Nauru, and Tonga (a quasi-independent state), in addition to the continent of Australia.

All the numbers of the Pacific countries and islands or island groups are listed in order. For example, 32 stands for Australia; 66 stands for the Caroline Islands. Where the authors have not recorded a specific island, an inclusive title is entered, e.g., 205 for Micronesia. This is the principal purpose of the Index: to identify the island or islands represented by numbers under DISTRIBUTION (Table 1 or Table 2).

The Index also includes at least the major synonyms. The synonymy is preceded by a dash (the numbers appear with the main entries). For example, the first entry in the Index is " - Austral Islands or Tubuai Islands." The main listing is (in both numerical and alphabetical order) "315. Tubuai Islands or Austral Islands."

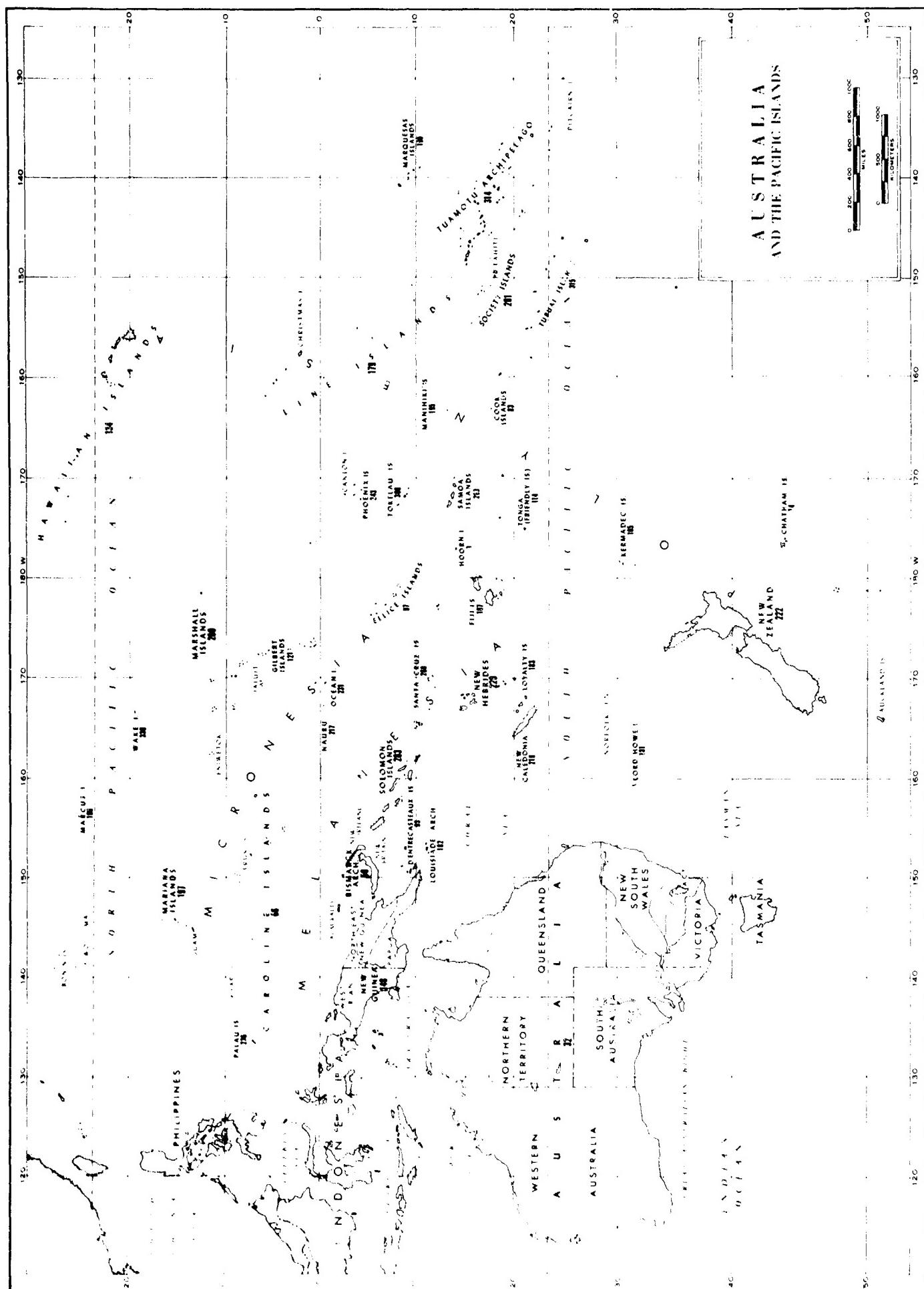
*B. V. Travis, Herbert H. Casewell, Jr., William B. Rowan, Heile Starcke, and Carl W. Ross: Classification and coding system for compilations from the world literature on insects and other arthropods that affect the health and comfort of man, Technical Report ES-4, Quartermaster Research & Engineering Center, Natick, Massachusetts, 1962, 259 pp.

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- 197. Mariana Islands
- 199. Marquesas Islands

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 - Tonga or Friendly Islands, 114
- 308. Tokelau Islands or Union Islands
- 314. Tuamotu Archipelago or Low Archipelago
- 315. Tubuai Islands or Austral Islands
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- 330. Wake Island
 - Western Samoa, included in Samoa Islands, 263
- 338. East Pacific Islands (Inclusive title)



ARTHROPOD DATA

A. MOSQUITOES

The mosquito entries include information on the biology of the larvae and adults in addition to distribution and disease transmission. As might be expected, the mosquitoes constitute a large assortment of species in Australia and the Pacific Islands. The extremely diverse ecological conditions provide habitats that are occupied by about 328 species or subspecies. The tabulations will show that some of the species have a large documentation of their biology. Usually such species are of great economic importance because they are important vectors. For some species there is almost no information except distributional data. Such species are usually uncommon or else are thought to be of little significance as vectors.

So many mosquitoes will bite man that an effort has been made to make a complete listing of mosquito species and subspecies. The synonymy is a difficult problem in this group; thus, many species and subspecies in the lists are not valid names.

TABLE 1 - MOSQUITOES

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>Aedes aegypti</i> (Theobald)	Shallow depression pools, clear fresh dark brown water; ---; 32° ---; ---; 32	Marks Edwards	1949 1924
<i>aegypti</i> (Linnaeus)	Rain water tanks, walls, roof gutters; bites indoors day and night, carrier of yellow fever, all year; 32*	Cooling	1924
	Artificial containers; ---; 32	Lee	1944
	---; experimental transmission of dengue; 32	Roy & Brown	1954
	---; common in houses, capable of transmitting dengue; 32°	Siler et al.	1926
	---; bites day and night, Feb., March and Nov.; 32°	Taylor	1943a
	---; ---; 32, 50, 83, 107, 114, 121, 134, 148, 197, 219, 220, 263, 281, 283, 314 (Vector of yellow fever)	Kumm	1931
	Artificial containers; Aug.; 50	Laird	1946
	Artificial container; ---; 66. Tree holes; ---; 114. ---; ---; 134*. Coconut and breadfruit tree holes, artificial container; possible vector of dengue; 197. Rainwater cisterns, coconut half on edge of woods; in houses mostly at sunset and sunrise; 200. Coconut husks and shells, water butts, top of cut bamboo, small open concrete drain, artificial container; ---; 263 (Domestic, artificial container, tree holes, coconut shells, cut bamboo, rainwater, chlorinated drinking water, slightly brackish water, partially shaded containers, bite mainly at night, incriminated vector of yellow fever and dengue)	Bohart & Ingram	1946
	---; all year; 66. Artificial container; July, Aug., Oct.; 197. Artificial container; June, July; 200. ---; Dec.; 330 (Near human habitations, artificial containers, tree holes, coconut shells, cut bamboo, chlorinated drinking water and slightly brackish well water, shaded rainwater collections, bites at night, possible vector of dengue and yellow fever)	Bohart	1957
	---; ---; 66, 197, 200 (Vector of dengue)	Farner	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES aegypti</i> (Linnaeus) (cont.)	---; ---; 83, 97, 107, 114, 183, 217, 219, 220, 263, 281, 283, 314, 315 (Domestic species, largely confined to seaports, in artificial containers of all types, rarely in tree holes or leaf axils of plants, predominantly diurnal feeders, but will bite man readily in artificial light, also in total darkness, important vector of dengue)	Belkin	1962
	Hollow tree stumps, coconut shells, taro pits, artificial containers; bites day and night; 97*	Venner	1944
	Artificial containers; enters houses, May-June; 107*	Lever	1943
	---; in houses, common, bites by day, Dec.-Feb.; 107*	Lever	1943 a
	Drains, artificial containers within and around houses; bites by day; 107	Paine	1943
	---; ---; 121 (Cisterns, artificial containers)	Smart	1943
	---; ---; 148, 203, 205, 245 (Artificial containers, occasionally in leaf axils, leaves, bamboo stumps, tree holes, coconut shells in immediate vicinity of human dwellings, active by day)	Farner et al.	1946
	---; active during day and evening, experi- mentally infected with dengue; 179*	Ross	1948
	Rainwater, brackish water, cisterns, coconut shells, plant leaves; diurnal, domestic; 197°. ---; abundant; 200°	Farner	1944
	Fields; ---; 197	Travis	1947
	Semi-permanent rain pools, in flooded basements of homes; Feb.-May; 219*. Artificial containers; ---; 220*, 283*	Perry	1948
	Artificial containers near houses, flower vases in cemeteries; enters houses, suspected vector of dengue; 219	Oman & Christenson	1947
	Water-holding plants, tree holes; ---; 219	Williams	1943
	---; in houses, bites man readily; 220°	Perry	1946
	---; naturally infected with non-periodic <i>Wuchereria bancrofti</i> ; 263, 281	Raghavan	1961
	---; common, enters houses; 281	Galliard et al.	1949

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>aegypti</i> <i>aegypti</i> (Linnaeus)	---; ---; 32, 50, 66, 107, 114, 121, 134, 148, 197, 219, 220, 236, 238, 263, 281 (Domestic water containers, neutral or alkaline)	Knight et al.	1944
<i>aegypti</i> <i>queenslandensis</i> (Theobald)	---; ---; 32	Knight et al.	1944
	---; ---; 219	Mattingly	1957
<i>agrihanensis</i> Bohart	Coconut tree holes; June, Aug.; 197	Bohart	1957
<i>albilabris</i> Edwards	Tree holes, bamboo, leaf axils of various plants including <i>Pandanus</i> and palms, coconut shells and husks, artificial containers including canvass; ---; 283	Belkin	1962
	Coral pools with high organic content; ---; 283	Perry	1949
<i>albirostris</i> (Macquart)	---; ---; 222	Taylor	1934 a
<i>albitarsis</i> Taylor	Creek; ---; 32	Taylor	1944
	---; ---; 148	Lee	1944
<i>alboannulatus</i> (Macquart)	Ground and rock pools, clear or muddy water exposed to the sun; bites by day; 32°	Dobrotworsky	1965
	Swamps, rock pools and sublittoral rock pools; rarely bites except in shady gullies; 32	Mackerras	1928
	Fresh water in rock pools, occasionally in brackish marshes; ---; 32	Lee	1944
	Fresh water lagoons, wells; ---; 32	Edwards	1924
	Artificial containers; ---; 32	Ferguson	1926 a
	---; May-Aug.; 32	Minter	1950
	---; ---; 32, 50 (Rock pools, wells, grassy rain- water pools)	Knight et al.	1944
<i>albolineatus</i> (Theobald)	Fresh, clear, murky, and foul water with organic debris, artificial containers; in shady jungle by day; 50	Laird	1946
	Rot holes in trees; ---; 50	Taylor	1934
	---; ---; 50, 148, 197, 283 (Tree holes, coconut shells and husks, bamboo stumps, fallen leaves and artificial containers, seldom attracted to man)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>albolineatus</i> (Theobald) (cont.)	---; ---; 50, 283 (Rock holes) ---; ---; 134	Knight et al. Stone et al.	1944 1959
	Coconut husks, leaf axils of taro, wild in path of forest, axils of leaves of Sago palm, tree holes, artificial containers; ---; 283	Paine & Edwards	1929
<i>albopictus</i> (Skuse)	---; ---; 32 (Coconut shells, ditches, pools, rivulet, bites day and night, indoors and outside, efficient intermediary host of dengue, incomplete development of <i>Wuchereria bancrofti</i>) ---; ---; 32, 148 (Tree holes, bamboo, leaf axils of several plants, rock pools, artificial containers, bites man) ---; ---; 32, 107, 134, 148, 281, 314 (Vector of yellow fever) ---; ---; 83, 199 (Tree holes, rock holes near dwellings, water butts and artificial containers, experimental transmission of yellow fever, vector of dengue) Axils of <i>Bilbergia</i> , <i>Crimun</i> , <i>Alocasia</i> and <i>Pandanus</i> , lower forest zone and urban sections; ---; 134*. Tree holes, artificial containers; bite vigorously during the day, suspected vector of dengue; 197° (Tree holes, cut bamboo, rock holes, leaf axils, artificial containers in weedy ditches, semi-domestic, under leaves, severe pest in wooded areas and bite during the day, vector of dengue) Fresh water; ---; 134 Wells; ---; 134 ---; Aug.-Nov.; 134	Taylor Steffan Kumm Smart Bohart & Ingram Pemberton Anonymous Bonnet & Worcester Farner et al.	1943 1966 1931 1943 1946 1943 1944 1946 1946
	---; ---; 134, 148, 197, 203, 205, 245 (Temporary water collections, bamboo and tree stumps, tree holes, leaf axils, coconut shells, rock pools, ditches and artificial containers close to human dwellings, rarely enters houses, bites at twilight and shady places by day) ---; ---; 134, 197 (<i>Nepenthes</i> , considered to be an efficient vector of dengue, frequently a serious pest) ---; ---; 134°. Tree holes, coconut shells, artificial containers; Mar., July-Sept., Nov.; 197° Tree holes and bamboos; ---; 148	Belkin Bohart Brug	1962 1957 1931

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES alboscutellatus</i> (Theobald)	---; ---; 32, 50, 148, 283 (Shallow pools on the edge of jungle, wheel ruts, bite during the evening) ---; bite by day in shady jungle and forest; 50° ---; ---; 134, 197 Flooded swamp areas, wood pools, rock holes and potholes in stream bed; bite in daytime in forest areas; 283°	Steffan Laird Knight & Hull Belkin	1966 1946 1952 1962
<i>alocasicola</i> Marks	Axils of Cunjevoi; ---; 32 ---; bites occasionally in rain forest; 32°	Knight & Marks Marks	1952 1948
<i>alternans</i> (Westwood)	Brackish and fresh water pools and swamps; bites by day; 32° ---; May; 32 ---; ---; 32, 148, 219 (Brackish and salt water swamps, fresh ground pools) ---; ---; 32, 148, 219 (Mangrove swamps, salt marshes, rarely fresh marshes, predaceous) ---; ---; 32, 148, 219 (High tide and inland marshy pools, predaceous, bites man chiefly at sundown) ---; ---; 183. ---; anthropophilic; 219 (Swamps and swampy pools, brackish or fresh, on the coast or inland) Brackish pools; ---; 219	Dobrotworsky Minter Lee Knight et al. Steffan Belkin Perry	1965 1950 1944 1944 1966 1962 1950
<i>ulticola</i> Bonne-Wepster	At 2850-3800 meters elevation; ---; 148	Bonne-Wepster	1948
<i>andersoni</i> Edwards	Sparsely wooded areas, tea-tree scrub, clean, shallow roadside ditches and excavations, pools and peat swamps; bites by day, Mar. and Sept.; 32° ---; Oct.-Feb.; 32	Dobrotworsky Mackerras	1965 1927 a
<i>andrewsi</i> Edwards	---; ---; 179	Stone et al.	1959
<i>anggiensis</i> Bonne-Wepster	---; ---; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i>			
<i>annandalei</i> (Theobald)	---; ---; 148 (Tree holes and bamboo)	Steffan	1966
<i>antipodeus</i> (Edwards)	Slime in mud; country and bush, day and night biter, all year; 222°	Graham	1939
	Ground pools, most active in cold water; ---; 222	Belkin	1962
<i>aobae</i> Belkin	Large tree hole in deep shade; ---; 220°	Belkin	1962
<i>argenteus</i> Poiret	---; ---; 32**, 107**. Tanks, flower vases; enter houses; 283	Lever	1934
	---; ---; 50, 83, 134. Occasionally in coconut husks, broken bamboos and tree-wells, artificial container; all year; 263	Buxton & Hopkins	1927
	Artificial containers; Dec.; 148	Holland	1933
	---; ---; 222	Edwards	1924
	Artificial containers; ---; 263	Buxton & Hopkins	1925
	---; common; 263	Edwards	1928
	Plantations in water drawn from tanks inadequately screened, water used in flower vases, ant traps, coconut husks; ---; 283	Paine & Edwards	1929
<i>argenteitarsis</i> Brug	Fallen palm leaves in shaded sago swamp and rain forest; ---; 148	Steffan	1966
<i>argyronotum</i> Belkin	Tree holes, rock holes and rock pools in small shaded streams; sylvan; 283	Belkin	1962
<i>ashworthi</i> Edwards	Fresh water swamps; ---; 32, 148	Lee	1944
<i>aurantius</i> (Theobald)	---; ---; 148 (Pig wallows, clear, marshy pools, grassy swamp pools)	Lee	1944
<i>aurantius</i> <i>chrysogaster</i> (Taylor)	Shallow rock pools with decaying vegetation; ---; 32 Knight et al.	Knight et al.	1944
	---; ---; 32, 148 (Shallow rock pools with decaying vegetable matter, puddles, crab pot hole, coral depression, highly polluted artificial hole)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i>			
<i>aurantius</i>			
<i>nigrescens</i> Edwards	---; ---; 148, 283 (Muddy algal ditch, hoof print, predaceous)	Knight et al.	1944
<i>aureostriatus</i> (Doleschall)	Tree holes and bamboo stumps; ---; 148	Lee	1944
<i>auridorsum</i> Edwards	Tree holes; ---; 32	Lee	1944
	---; bites during day; 32°	Marks	1948
<i>aurimargo</i> Edwards	---; ---; 32, 148 (Tree holes and coconut shells)	Steffan	1966
<i>australiensis</i> (Theobald)	Tree holes; bites at night in vine scrub; 32°	Marks	1948
	Fallen palm fronds in forest; ---; 32	Lee	1944
	---; ---; 148	Cooling	1924 a
<i>australis</i> (Erichson)	Shallow snow pools at 6,000 feet altitude; ---; 32°	Cooling	1924 a
	Salt waters, rock and ground pools; ---; 32	Dobrotworsky	1965
	---; ---; 32, 181, 222 (Only in salt or brackish rock pools, slightly above high-tide mark, bites man readily)	Belkin	1962
<i>azureosquamatus</i> Bonne-Wepster	---; at 100 meters elevation, Apr., Aug.-Sept.; 148	Bonne-Wepster	1948
<i>bancrofti</i> Taylor	---; ---; 32	Lee	1944
<i>bancroftianus</i> Edwards	Fresh water pools with vegetation, creeks and roads; bites by day; 32°	Dobrotworsky	1965
	---; ---; 32	Lee	1944
<i>becki</i> Belkin	Crab holes; ---; 283	Belkin	1962
<i>bifoliatus</i> King & Hoogstraal	---; May; 148	Steffan	1966
<i>biocellatus</i> (Taylor)	Shaded tree holes in dark reddish brown water, hollow pipe; occasionally bites; 32°	Marks	1948
	Tree and stump holes; ---; 32	Knight & Marks	1952
	In scrub on river bank; ---; 32	Ferguson	1926 a
	---; rare; 32	Mackerras	1928
<i>bcugainvillensis</i> Marks	Leaf axils of <i>Sararanga</i> and <i>Pandanus</i> ; ---; 283	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i>			
<i>britteni</i> Marks & Hodgkin	---; ---; 32	Stone et al.	1959
<i>brugii</i> Edwards	---; ---; 148	Edwards	1924
<i>burnetti</i> Belkin	Leaf axils of <i>Freycinetia storkii</i> , <i>F. milnei</i> ; ---; 107	Belkin	1962
<i>burpengaryensis</i> (Theobald)	Well; ---; 32	Edwards	1924
<i>buxtoni</i> Belkin	---; ---; 283	Belkin	1962
<i>cacozelus</i> Marks	---; ---; 32	Stone	1963
<i>caecus</i> (Theobald)	From a whirlpool in an inlet; ---; 148 ---; ---; 148 (Open jungle pools)	Brug Knight et al.	1931 1944
<i>cairnsensis</i> (Taylor)	---; ---; 32	Edwards	1924
<i>calabyi</i> Marks	---; ---; 32	Stone	1963
<i>calcariæ</i> Marks	Pits under uprooted trees; bites in shade or during cloudy weather, Dec.; 32°	Dobrotworsky	1965
<i>comptorhynchus</i> (Thomson)	Brackish and fresh water swamps in open country; bites by day and after sunset; 32° Shady brackish river overflow; ---; 32 ---; Oct.-March and Aug.; 32 ---; rare; 32	Dobrotworsky Knight et al. Mackerras	1965 1944 1927a
<i>candidoscutellum</i> Marks	Tree holes in rain forest, clear water; Feb., June, Sept.; 32 ---; ---; 32, 148 (Tree holes and rock pool)	Marks Knight & Marks	1948 1952

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>carmenti</i> Edwards	---; ---; 32, 50, 148 (Shaded, shaded, temporary jungle pools, bites in forest areas during the day)	Steffan	1966
	---; bite by day in shady jungle and rain forest, enters houses; 50°	Laird	1946
	---; Apr., Aug.; 148	Bonne-Wepster	1948
	Shallow, heavily shaded temporary jungle pools which are frequently flushed, shallow rain pools; bites man voraciously in forested areas during the day; 283°	Belkin	1962
	Pools, crab holes in mangrove area; ---; 283	Paine & Edwards	1929
	---; common, enters houses; 283	Edwards	1924
<i>chathamicus</i> Dumbleton	---; ---; 222	Stone	1963
<i>chionodes</i> Belkin	---; ---; 283	Belkin	1962
<i>chrysogaster</i> (Taylor)	Shallow, shaded rock pool with decaying vegetation; ---; 32	Taylor	1927
<i>clelandi</i> (Taylor)	Fresh water pools with or without vegetation, polluted rabbit burrows, tea-tree scrub; bites by day, July, Sept.-Nov.; 32°	Dobrotworsky	1965
	---; ---; 32	Edwards	1924
<i>clintoni</i> Taylor	---; ---; 148	Knight & Marks	1952
<i>concolor</i> Taylor	Rock pools of varying salinity; bites chiefly at dusk; 32°	Mackerras	1928
	---; ---; 222	Knight et al.	1944
<i>continentalis</i> Dobrotworsky	Rain water pools, small swamps with grassy edges exposed to the sun; bites by day, Sept., Nov.-Feb. 32°	Dobrotworsky	1965
<i>cooki</i> Belkin	Coconut shells, <i>Pandanus</i> axils, cisterns, artificial containers; suspected vector of filariasis; 83	Belkin	1962
<i>crucians</i> (Walker)	---; ---; 32	Edwards	1924

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>cuccioi</i> Belkin	Rot holes at base of tree growing in a stream bed, rock pools and pot holes in stream bed, flooded stream, small clear swampland stream, flooded area along a creek; near a sandy pool in a stream bed; 283	Belkin	1962
<i>culexiformis</i> (Theobald)	---; ---; 32, 50, 148	Steffan	1966
<i>cunabulanus</i> Edwards	---; Nov.-Feb.; 32	Mackerras	1927a
<i>cunninghami</i> Taylor	---; ---; 32	Taylor	1944
<i>daggyi</i> Stone & Bohart	Crab and lobster holes in fresh water swamps, brackish water near the ocean; ---; 220	Perry	1946
	Ground pools; ---; 220. ---; ---; 283	Stone & Bohart	1944
<i>daliensis</i> (Taylor)	---; ---; 32	Lee	1944
<i>dasyorrhus</i> King & Hoogstraal	---; ---; 148, 283 (Holes in horizontal tree trunks projecting into or over ocean water, containing salt water spray, artificial containers, tin cans in mangrove area, tires by a dock)	Belkin	1962
<i>derooki</i> Brug	---; ---; 148 (River bed rock pool)	Knight et al.	1944
<i>digoelensis</i> Brug	---; ---; 148	Taylor	1934a
<i>dobodurus</i> King & Hoogstraal	Cup fungi in rain forest, artificial container in forest near sea level, fallen palm leaves, sago leaves, fallen tree hole; ---; 148	King & Hoogstraal	1946
<i>dobrotworskyi</i> Marks	Leaf bases of sword grass, among large patches of grass in swampy bush and along rivers; bites man usually in face, Nov.-Mar.; 32°	Dobrotworsky	1965
<i>dorseyi</i> Knight	Tree holes, coconut shells, artificial containers; in woods, Aug., Nov.-Dec.; 236	Bohart	1957
<i>dybasi</i> Bohart	Pitcher plants, taro axil, <i>Nepenthes mirabilis</i> ; bites by day, Mar., May, Aug., Nov., Dec.; 236°	Bohart	1957
<i>edgari</i> Stone & Rosen	Shallow temporary ground pools of fresh water; efficient laboratory host for the Tahitian strain of <i>Wuchereria bancrofti</i> , bites man at night; 281°	Belkin	1962
<i>edwardsi</i> (Barraud)	---; ---; 283	Lee	1944
<i>edwardsi</i> <i>tulagiensis</i> Edwards	---; ---; 268 ---; ---; 283	Edwards Knight et al.	1926 1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i>			
<i>edwardsi</i>			
<i>var. tulagiensis</i> Edwards	---; ---; 283	Barraud	1934
<i>elchoensis</i> Taylor	---; ---; 32	Lee	1944
<i>fasciatus</i> Fabricius	---; ---; 32 (Vector of yellow fever)	Martini	1930
<i>fergusoni</i> (Taylor)	---; ---; 32	Cooling	1924 a
<i>fijiensis</i> Marks	Mostly in <i>Pandanus</i> leaf axils and less common in axils of <i>Alocasia indica</i> and <i>Freycinetia</i> sp.; nocturnal and bites man vigorously and persistently, suspected vector of non-periodic <i>Wuchereria bancrofti</i> , naturally infected with filarial larvae; 107° ---; naturally and experimentally infected with non-periodic <i>W. bancrofti</i> ; 107	Belkin	1962
<i>fimbripes</i> Edwards	Crab holes; ---; 50	Edwards	1924
	Ground pools; ---; 50	Taylor	1934
	---; ---; 148 (Crab holes)	Steffan	1966
	Crab holes; ---; 220	Buxton & Hopkins	1927
<i>finlaya</i> <i>fijiensis</i>	---; naturally infected with <i>Wuchereria bancrofti</i> ; 107	Manson-Bahr	1959
<i>flavifrons</i> (Skuse)	Ground pools with or without vegetation in the sun or partly shaded, pits under uprooted trees; bites during the day, common; 32°	Dobrotworsky	1965
<i>flavipennis</i> Giles	---; ---; 283	Taylor	1934 a
<i>foliformis</i> King & Hoogstraal	---; April-May, Aug., Dec.; 148	Steffan	1966
<i>franclemonti</i> Belkin	Leaf axils of broad-leaf <i>Pandanus</i> ; ---; 283°	Belkin	1962
<i>freycinetiae</i> Laird	Leaf axils of <i>Freycinetia milnei</i> and <i>Pandanus</i> ; ---; 107	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES funereus</i> (Theobald)	Tea-tree swamp; bites day and night; 32° Fresh water swamps; ---; 32 ---; ---; 32, 50, 148, 283 (Fresh water swamps, bites man) <i>Pandanus</i> swamp; bites by day in shady jungle; 50° ---; ---; 50, 144 (Coasts in vicinity of mangrove and scrub) Muddy ditch with some algal scum and water in hoof marks, large and shallow rain water pool containing dead coconut leaves just above the beach; ---; 283 ---; common and annoying in coconut grove area and jungle, bites by day; 289°	Bearup & Laurence Lee Steffan Laird Hill Paine & Edwards Oman & Christenson	1947 1944 1966 1946 1925 1929 1947
<i>funereus</i> <i>funereus</i> (Theobald)	---; ---; 32, 148	Knight et al.	1944
<i>funereus</i> <i>ornatus</i> (Theobald)	---; ---; 32, 50, 220, 283 (Irrigation ditches, partially shaded rainwater pools, hoof marks) Swampy areas; bites by day in jungle and rain forest; 50° Grassy pools; ---; 50, 148, 220 ---; ---; 50, 148 (Grass covered plantation drains, jungle coastal and inland localities, bites by day and night) Road ruts, wallows, occasionally ditches; viciously bites man by day in jungle; 220° Grass covered drains; swamps; 220° ---; ---; 268	Knight et al. Laird Lee Hill Perry Buxton & Hopkins Lever Paine & Edwards	1944 1944 1946 1944 1925 1946 1944 1934 1929
<i>fuscipalpis</i> Belkin	Leaf axils of <i>Pandanus</i> ; ---; 283	Belkin	1962
<i>fuscitarsis</i> Belkin	Leaf axils of broad and narrow-leaved <i>Pandanus</i> ; ---; 283	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i>			
<i>futunae</i> Belkin	Tree holes in deep forest, coconut half in bush area; ---; 1°	Belkin	1962
<i>gahnicola</i> Marks	Axils of sword grass in coastal swamps; bites late afternoon in dry scrub; 32°	Marks	1948
	Axils of <i>Gahnia</i> and <i>Pandanus</i> ; ---; 32	Knight & Marks	1952
<i>gani</i> Bonne-Wepster	<i>Nepenthes</i> ; ---; 148	Knight & Marks	1952
<i>geoskusea</i> Amos	Mangrove crab and mud-lobster holes; ---; 107	Lever	1945
<i>gracilislineatus</i> Bonne-Wepster	---; ---; 148	Steffan	1966
<i>gressitti</i> Bohart	<i>Pandanus</i> axil; Feb., Aug.; 236	Bohart	1957
<i>guamensis</i> Farner & Bohart	Natural and artificial containers close to habitations, tree hole, jungles; rests on vegetation, bites in woods in mornings, Oct., Dec.; 197°	Bohart	1957
	Tree hollows, coconut husks and shells, carabao wallow, water drum, water tank; common and troublesome in the forests; 197	Farner & Bohart	1945
	Cut bamboo and taro leaf axils; rarely bites man; 197°	Marks	1954
<i>gurneyi</i> Stone & Bohart	Tree holes and stumps, leaf axils also <i>Pandanus</i> , artificial containers; ---; 283	Belkin	1962
<i>hakanssoni</i> Knight & Hurlbut	Banana stump, tree holes, coconut shells, canoe, artificial containers; Jan., July; 66	Bohart	1957
	---; ---; 66, 283 (Coconut shells, tree holes, artificial containers)	Marks	1954
<i>hebrideus</i> Edwards	---; ---; 50, 148, 220, 236 (Tree holes, coconut shells, shallow wells, taro leaves, artificial containers)	Farner et al.	1946
	---; ---; 66, 148, 220, 268, 283 (Tree holes, coconut husks and shells, artificial containers, taro leaf axils, attack readily, persistent diurnal biters, suspected vector of dengue)	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>hebrideus</i> Edwards (cont.)	Palm boat, coconut shells, old native pot, old mollusk shells, tree trunk, axil of taro leaf; ---; 148. Tree holes, coconut shells, hollows among roots, holes in raised coral, clam shells in a garden, old bottles, shallow wells, rot holes, felled log, tops of drums, bomb crater and artificial containers; suspected vector of dengue; 220 (Bites man)	Farner & Bohart	1945
	Tree holes, coconut shells, fallen fronds of coconut and breadfruit; possible vector of dengue; 220	Perry	1948
	Artificial containers; bites man by day; 220°	Daggy	1945
	Tree holes, coconut shells, tin cans, artificial water catchments; bites by day; 289°	Oman & Christenson	1947
<i>hensilli</i> Farner	Coconut shells, tree holes, rock crevices, fallen coconut fronds, artificial containers; bites man from dawn to dusk in sun or shade, enters buildings to bite, possible carrier of dengue and filariasis; 66°	Bohart	1957
	---; ---; 236, 283 (Coconut shells, tree holes, rock crevices, fallen coconut fronds, artificial containers, bites man)	Marks	1954
	---; ---; 236 (Possible vector of filariasis and dengue)	Bohart & Ingram	1946
<i>hesperonotius</i> Marks	---; ---; 32	Stone	1961
<i>hodgkini</i> Marks	---; ---; 32	Stone	1961
<i>hoguei</i> Belkin	Coconut shells; ---; 283	Belkin	1962
<i>hollandius</i> King & Hoogstraal	Shaded palm leaves, sago swamps, artificial containers, tree holes in rain forest, coconut husks; March-April, Sept., Nov.-Dec.; 148	King & Hoogstraal	1946
<i>hollingsheadi</i> Belkin	Leaf axils of <i>Pandanus</i> species; ---; 283	Belkin	1962
<i>horrescens</i> Edwards	Bamboo, tree-ferns, rarely in coconut shells; ---; 107	Marks	1954
	Tree holes, coconut shells, artificial containers; ---; 107	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES hui</i> Bohart	Taro axils; at light, bloodsucker, seldom enters houses; 236°	Bohart	1957
<i>humeralis</i> Edwards	---; ---; 32	Cooling	1924 a
<i>hybrida</i> (Taylor)	---; ---; 32	Cooling	1924 a
<i>imperfectus</i> Dobrotworsky	Grassy pools in shade; bites by day; 32°	Dobrotworsky	1965
<i>imprimens</i> (Walker)	---; ---; 50° ---; deep jungle; 148 ---; ---; 50, 148, 283 (Temporary pools, flowing water in flooded areas, in deep or partial shade, bites man readily at daytime in and around forested areas, capable of biting through dense and thick clothing and inflict very painful bites) Partly shaded, leafy woodland pools; ---; 283 (Bites viciously in deep shade during day)	Knight & Hull Belkin	1953 1962
	Shaded forest; common, bites by day; 283°	Paine & Edwards	1929
	---; common and annoying in jungle and coconut grove area, bite by day; 289°	Oman & Christenson	1947
<i>incertus</i> Edwards	---; ---; 148	Edwards	1924
<i>inxpectatus</i> Bonne-Wepster	At 1700 meters elevation; ---; 148°	Bonne-Wepster	1948
<i>iwi</i> Marks	---; ---; 32	Stone et al.	1959
<i>josephinae</i> Marks	---; ---; 32	Stone et al.	1959
<i>keefei</i> King & Hoogstraal	---; ---; 32, 148 (Tree holes)	Knight & Marks	1952
<i>kermorganti</i> (Laveran)	---; ---; 148 Brackish pools; ---; 219	Knight et al. Perry	1944 1950
<i>knighti</i> Stone & Bohart	Axils of the broadest-leaved Pandanus, confined to the lower leaves; ---; 283	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES kochi</i> (Dönnitz)	Tea-tree swamp; bites day and night; 32°	Bearup & Laurence	1947
	Leaf axils of <i>Pandanus</i> and <i>Colocasia</i> ; ---; 32, 107, 114, 148, 283	Lee	1944
	---; in scrub in late afternoon; 32*	Marks	1948
	---; naturally infected with <i>Wuchereria bancrofti</i> ; 32	Taylor	1946
	---; ---; 32, 50, 148, 283 (Coconut bushes, <i>Pandanus</i> and taro leaf axils)	Knight et al.	1944
	---; ---; 32, 107, 283 (Axils of <i>Pandanus</i> and taro, coconut shells, enters houses)	Stone & Bohart	1944
	---; ---; 32, 148 (<i>Colocasia</i> , most persistent biter, day and night, efficient host of <i>Wuchereria bancrofti</i>)	Taylor	1943 a
	Leaf axils of <i>Colocasia</i> and <i>Pandanus</i> ; occasionally enters houses, bite in evening and after dawn; 50°	Laird	1946
	---; bites indoors at night; 50°. In axils of <i>Colocasia</i> ; ---; 148	Taylor	1934
	Leaf axils of <i>Colocasia</i> , in or near forest; ---; 107	Edwards	1935 a
	<i>Alocasia</i> ; bites at night; 107°	Paine	1943
	---; ---; 114, 148, 283 (Leaf axils of <i>Pandanus</i> , banana and taro plants, intermediary host of <i>Wuchereria bancrofti</i>)	Taylor	1938
	---; intermediary host of <i>Wuchereria bancrofti</i> ; 148	Cilento	1940 +
	---; experimental vector of <i>W. bancrofti</i> ; 148*	Avery	1946
	---; experimentally infected with <i>W. bancrofti</i> ; 148	Raghavan	1961
	---; ---; 263	Edwards	1924
<i>kochi</i> <i>samoana</i> Grünberg	Coconut shells; ---; 50. ---; ---; 107, 148. Axils of <i>Colocasia</i> , common in the cultivated taro and wild Araceae on the banks of streams in the rain forest; ---; 263	Buxton & Hopkins	1927
	---; ---; 114, 283	Taylor	1934 a
	Leaf axils of cultivated and wild Araceae; bites at night; 263°	Edwards	1928

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i>			
<i>labeculosus</i> Coquillett	---; ---; 32	Cooling	1924 a
<i>lamelliferus</i> Bohart & Ingram	Mangrove swamps, in fresh and brackish water of palm axils and tree holes; mangrove swamps, bite at noon and early evening; 66°	Bohart & Ingram	1946
	Artificial container near houses; Jan., July, Dec.; 66. Artificial container; near building, July-Aug., Dec.; 236° (Mangrove swamps with both fresh and brackish water of palm axils and tree holes, biting in or near swamps from midday to early evening)	Bohart	1957
<i>lateralis</i> Theobald	---; ---; 148	Edwards	1924
<i>lauriei</i> (Carter)	Tree holes; ---; 181	Lee	1944
	Hollow of fallen tree; ---; 263	Edwards	1924
<i>leilae</i> King & Hoogstraal	---; March-April; 148	Steffan	1966
<i>lewelleni</i> Starkey & Webb	Pandanus axil; Apr., Aug.; 236	Bohart	1957
<i>lineatopennis</i> (Ludlow)	---; ---; 32 (Temporary, rain-filled, grassy ground depressions, light traps, habitually feeds upon human blood)	Knight & Hull	1953
<i>lineatus</i> (Taylor)	---; ---; 32, 50, 148, 219, 220, 268, 283 (Semi-domestic, mostly in temporary ground pools in cleared and partly shaded areas in association with man, less often in undisturbed jungle areas, bites man very readily in the daytime, particularly in shaded areas)	Belkin	1962
<i>littlechildii</i> Taylor	---; ---; 148	Taylor	1933
<i>longiforceps</i> Edwards	Crab holes, temporary flood pool; bites more at night than day; 283°	Belkin	1962
<i>longirostris</i> (Leicester)	Crab holes; ---; 32	Edwards	1924
	---; ---; 32, 148 (Crab holes in mangrove swamps, brackish rock pools, small shady ground pools and artificial containers)	Steffan	1966
<i>lunulatus</i> King & Hoogstraal	Crayfish hole in shaded rain forest; ---; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES luteifemur</i> Edwards	Temporary rain pools with vegetation exposed to the sun, pits; bites by day, Sept.-Mar.; 32° ---; ---; 32	Dobrotworsky Lee	1965 1944
<i>macintoshi</i> Marks	---; ---; 32	Stone	1961
<i>mackerrasi</i> Taylor	Rock pools, water collection in a canoe; ---; 32 Grassy pool near creek; ---; 32	Knight & Marks Knight et al.	1952 1944
<i>macleayanus</i> Mackerras	---; ---; 32	Lee	1944
<i>macmillani</i> Marks	---; bites by day, Feb.; 32°	Dobrotworsky	1965
<i>macrodixoa</i> Dyar & Shannon	---; near river; 148	Brug	1932
<i>maehleri</i> Bohart	Pitcher plant; Mar., Sept., Nov.; 66	Bohart	1957
<i>mallochi</i> Taylor	Tree holes; bites man just before and at dusk; 32° ---; ---; 32	Dobrotworsky Knight & Marks	1965 1952
<i>marshallensis</i> Stone & Bohart	---; at light, Jan., Mar., Dec.; 66°. ---; ---; 121° ---; Jan., Mar., June-Aug., Oct.-Nov.; 200 (Coconut shells, tree holes, hollows at the base of coconut fronds, barrels, wells)	Bohart	1957
	Well; ---; 121. Coconut shells, tree holes, hollows at coconut frond bases; bite man during day, in woods, ... and around villages, on damp walls; 200°	Bohart & Ingram	1946
	Coconut halves, hollow trees, hollows at base of coconut palm; ---; 200	Farner & Bohart	1945
<i>mcormicki</i> Belkin	Temporary ground pools in deeply shaded jungle and in partially open areas; on tree trunk; 283	Belkin	1962
<i>mediovittata</i> Belkin	Shallow temporary pools in densely shaded but open area near a swamp; ---; 283	Belkin	1962
<i>medialis</i> Brug	Pitcher plant; near river; 148	Brug	1932
<i>minutissima</i> King & Hoogstraal	---; ---; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES milsoni</i> (Taylor)	Partly shaded ground and rock pools with vegetation; Sept.-Nov.; 32°	Dobrotworsky	1965
	Tree holes; ---; 32	Hill	1925
<i>minutae</i> Taylor	---; ---; 32	Cooling	1924a
<i>moloensis</i> Taylor	---; bites man in late forenoon; 32°	Taylor	1929
	---; ---; 32	Knight et al.	1944
<i>monocellatus</i> Marks	Tree holes; ---; 32	Knight & Marks	1952
<i>multifolium</i> King & Hoogstraal	---; Jan., May; 148	Steffan	1966
<i>multiplex</i> (Theobald)	Fairly shaded ground pools, shallow well, swamps; bites by day, Jan.-Apr.; 32°	Dobrotworsky	1965
	---; ---; 32	Edwards	1924
	---; ---; 148	Steffan	1966
<i>neogeorgianus</i> Belkin	Leaf axils of very narrow-leaved "screw palm", <i>Pandanus</i> sp. and taro; ---; 283	Belkin	1962
<i>neomacrodixoa</i> King & Hoogstraal	---; ---; 148	Steffan	1966
<i>neopandani</i> Bohart	<i>Pandanus</i> and taro axils, mountainous areas; bites man during the day, Jan., Mar., June, Nov.; 197°	Bohart	1957
<i>nigrithorax</i> (Macquart)	---; bites man by day; 32°	Dobrotworsky	1965
	---; ---; 32	Edwards	1924
<i>nivalis</i> Edwards	Shallow pools, clear or cloudy with decayed leaves exposed to the sun; Oct.-Dec.; 32	Dobrotworsky	1965
	Temporary snow pools at 6000 feet; ---; 32	Knight et al.	1944
	---; bite at dusk, Jan. and Feb.; 32°	Mackerras	1927 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>nocturnus</i> (Theobald)	---; ---; 66, 83, 97, 107, 114, 121, 148, 183, 197, 200, 219, 220, 236, 263, 308 (Chiefly in temporary grassy ground pools, puddles and hoof marks, ponds and ditches following rain, bites readily and are a nocturnal pest in settlements following rains)	Belkin	1962
	---; ---; 134 (Artificial containers, temporary grassy ground pools, puddles, hoof prints, ponds and ditches following rains)	Steffan	1966
<i>normanensis</i> (Taylor)	Muddy rock pool in a water hole in a sandy creek bed; forest, day biting; 32°	Mackerras	1927 a
	Fresh, clear, or occasionally muddy water, casual pools or swampy areas, exposed to sun, hoof prints; ---; 32	Marks	1949
	Ground pools; ---; 32	Lee	1944
<i>notoscriptus</i> (Skuse)	Rock holes, roof gutters; enters houses, bites day and night; 32°	Mackerras	1928
	Semi-domestic, artificial containers; in dense scrub; 32	Ferguson	1926 a
	Tree holes, occasionally in rock and ground pools; ---; 32	Dobrotworsky	1965
	---; ---; 32, 50, 148, 183, 219 (Semi-domestic, artificial containers of all types, coconut husks and shells, tree holes and leaf axils of various plants)	Belkin	1962
	Tree hole; bites by day in shady jungle; 50°	Laird	1946
	Tree holes; ---; 148	Brug	1934
	---; ---; 148, 222 (Rock pools)	Lee	1944
	Rock holes, tree holes and artificial receptacles; ---; 219	Perry	1950
	Natural and artificial water containers, swamps, water holes, still and stagnant water rich in organic matter, hollow in rocks and caves, knot and rot holes, axils of nikau leaves, <i>Astelia</i> and banana palms in gardens and conservatories; sylvan, in shrubberies and gullies in partial sunshine, in houses, daytime biter, mostly early morning and late afternoon, prefers to bite on legs, Oct.-June; 222°	Graham	1929

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>novalbitarsis</i> King & Hoogstraal	Small containers, shaded tree holes, rock holes, fallen palm bracts, coconut leaves and husks; ---; 148	King & Hoogstraal	1946
<i>oakleyi</i> Stone	Tree holes, coconut shells during rainy season, trench, road rut, barrels, artificial containers; bloodsucker, May-July, Sept., Nov.-Dec.; 197° ---; Oct.; 197	Bohart	1957
	Artificial containers; ---; 205	Bohart & Ingram	1946
<i>occidentalis</i> (Skuse)	Ground and rock pools, brackish marshes, fallen palm fronds, concrete well, holes in fallen logs; ---; 32	Knight & Marks	1952
	Small water pool overgrown with coarse grass above a waterfall; ---; 32	Taylor	1927
	Tree hole; ---; 32	Knight et al.	1944
	---; May-Aug.; 32	Minter	1950
<i>occidentalis</i> <i>milsoni</i> (Taylor)	Ground and rock pools, occasionally in brackish marshes; ---; 32	Knight & Marks	1952
<i>oceanicus</i> Belkin	In taro and <i>Pandanus</i> ; ---; 114, 263	Belkin	1962
<i>ochlerotatus</i> <i>vigilax</i>	---; naturally infected with <i>Wuchereria bancrofti</i> ; 219	Manson- Bahr	1959
<i>ormatus</i> (Theobald)	---; common and annoying in jungle and coconut- grove area, bites by day; 289°	Oman & Christenson	1947
<i>painei</i> Knight	---; ---; 50, 283 (Temporary pools in forests and coconut plantations)	Steffan	1966
	Temporary pools in forested areas, coconut plantations; ---; 283°	Belkin	1962
<i>palauensis</i> Bohart	Coconut shell, tree hole, <i>Pandanus</i> axil, artificial containers; Aug.; 236	Bohart	1957
<i>palmarum</i> Edwards	Fallen palm fronds, seed pods, snail shell, bamboo; occasionally bite by day in forest; 32°	Marks	1948
	Artificial containers, cup fungi, bamboo, flower spathe; ---; 32	Knight & Marks	1952

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>Aedes panayensis</i> Ludlow	---; ---; 148 (Slightly brackish water in canoe, shaded, slightly brackish pool in a Nipa palm swamp, bites man in mangrove swamp during day)	Steffan	1966
<i>pandani</i> Stone	Leaf axils of Pandanus; enter houses at night, vicious biter during early morning, by day and late evening; 197°	Bohart & Ingram	1946
	Occasionally in taro; possible disease vector; 197	Bohart	1957
	Fields; ---; 197	Travis	1947
<i>papuensis</i> (Taylor)	Coconut husk, clear water in log cracks; ---; 50	Laird	1946
	---; ---; 50, 283 (Tree holes, rock pools, drum heads, on paper, sunlit ruts and coral pools)	Steffan	1966
	Tree holes, shaded rock pools, sunlit rut with decaying vegetation, sunlit fresh water in coral pool; April, June, Sept.-Oct.; 148	King & Hoogstraal	1946
	Small rock pools with decaying vegetation beside stream; ---; 148	Lee	1944
<i>parusimilis</i> King & Hoogstraal	Crayfish hole in rain forest, pools at edge of swamp; bites man by day; 148°	Steffan	1966
<i>recens</i> Edwards	Hollow bamboo stems; bites at light, Jan.-Feb.; 32°	Cooling	1924 b
	Tree holes; ---; 32	Lee	1944
<i>perkinsi</i> Marks	Peaty swamp pools in open heath country; bites by day, Apr., Dec.-Feb.; 32°	Dobrotworsky	1965
<i>permotatus</i> Farner & Bohart	Tree holes, coconut husks, artificial containers; ---; 220	Perry	1946
	Axil of taro leaf; ---; 220	Farner & Bohart	1945
<i>perryi</i> Belkin	Crabholes; ---; 283	Belkin	1962
<i>pipkini</i> Bohart	---; July-Sept.; 66°. ---; Aug.; 236	Bohart	1957
<i>plagiosus</i> Marks	---; rare; 32	Dobrotworsky	1965
<i>plumiferus</i> King & Hoogstraal	Buttress of large rain forest tree and tree holes; ---; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES poecilus</i> (Theobald)	---; ---; 32 ---; ---; 148 (Axils of aroid-type plants, banana, <i>Abaca</i> and <i>Pandanus</i> , rests in deep shaded thickets and ravines, bites man day or night)	Cooling Steffan	1924 a 1966
<i>polynesiensis</i> Marks	---; ---; 1, 83, 97, 107*, 199, 263, 281, 308, 314, 315 (Semi-domestic, tree holes, coconut husks and shells, artificial containers, crabholes, bites man, diurnal, peak of activity in late afternoon, most important vector of nonperiodic filariasis) ---; naturally infected with <i>Wuchereria bancrofti</i> ; 83. ---; naturally and experimentally infected with non-periodic <i>W. bancrofti</i> ; 107. ---; naturally infected with non-periodic <i>W. bancrofti</i> ; 263. ---; experimentally infected with non-periodic <i>W. bancrofti</i> ; 281	Belkin Raghavan	1962 1961
<i>postspiraculosis</i> Dobrotworsky	Temporary pools with or without vegetation; bites by day; 32°	Dobrotworsky	1965
<i>priestleyi</i> Taylor	---; ---; 32	Edwards	1924
<i>procax</i> Skuse	---; rare; 32	Dobrotworsky	1965
<i>pseudalbopictus</i> (Borel)	---; ---; 219	Stone et al.	1959
<i>pseudomediofasciatus</i> Theobald	---; ---; 32	Cooling	1924 a
<i>pseudonormanensis</i> Marks	Clear, fresh water drain, muddy rock pool, water hole, around grass tufts, shaded trench; bites by day in forest; 32° ---; ---; 32	Marks Stone et al.	1949 1959
<i>pseudoscutellaris</i> (Theobald)	---; ---; 83, 114, 263**, 281, 283°, 308, 314. ---; carrier of non-periodic filariasis; 107 (Coconut shells and husks, cacao pods, tree holes, artificial containers, crabholes, holes in lava, cut bamboo, water with high organic contents, in low growing vegetation, under houses, bite all day, particularly on cloudy days and in deep shade, prefers man) ---; ---; 97 (Tree holes, coconut husks, cacao pods, small shaded water collections of high organic content, concrete drains, artificial containers)	Bohart & Ingram Knight et al.	1946 1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES pseudoscutellaris</i> (Theobald) (cont.)	---; ---; 97*, 107*, 199, 219, 263, 281, 314 (Small collections of water in coconut shells and husks, tree holes, cacao pods, open concrete drains, hollow tops of coconut stumps, tin cans, rot holes, holes in lava, crab holes, wooden drums, bamboo stumps, small containers of water with high organic content, bites by day in shade)	Farner & Bohart	1945
	Tree holes, bamboo, native gongs, crabholes; ---; 107	Belkin	1962
	---; naturally and experimentally infected with non-periodic <i>Wuchereria bancrofti</i> ; 107, 245, 263, 281	Raghavan	1961
	---; ---; 245*	Oman & Christenson	1947
	Coconut shells, tins, tree holes, ground puddles; bite during day but most active in dense shade at dawn and dusk; 263	Byrd et al.	1945
<i>pulcherrimus</i> (Taylor)	Tree holes; ---; 32	Knight et al.	1944
<i>purpuraceus</i> Brug	---; ---; 32 ---; near river; 148	Lee	1944
<i>purpureifemur</i> Marks	---; ---; 32	Brug	1932
<i>purpureus</i> (Theobald)	Tree holes; ---; 32 ---; river bank; 148	Stone	1961
<i>purpuriventris</i> Edwards	Shaded ground pools, pits, flooded burrows; bites by day in spring and early summer and bites only after sunset, Dec.-Jan.; 32° ---; ---; 32	Taylor	1944
<i>quadrifolium</i> Brug	---; ---; 148	Dobrotworsky	1965
<i>quadrispinatus</i> King & Hoogstraal	---; ---; 148	Lee	1944
<i>quasirubithorax</i> (Theobald)	Tree holes, artificial containers; ---; 32 ---; ---; 32, 148 (Tree hole, concrete well and rock pool)	Steffan	1966
		Knight & Marks	1952

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES quasiscutellaris</i> Farner & Bohart	---; ---; 50, 283 (Tree holes, coconut husks and shells, artificial containers, <i>Pandanus</i> leaf axils, bites man)	Steffan	1966
	Coconut husks and shells, <i>Pandanus</i> leaf axils, artificial containers; in the bush; 283°	Belkin	1962
	Tree holes, coral pockets, water with high organic content; ---; 283	Perry	1949
	Wells, canoes; ---; 283	Knight et al.	1944
	---; common; 283	Perry	1948
	Tree holes, coconut shells, artificial containers; bites by day; 289°	Oman & Christenson	1947
<i>queenslandis</i> (Strickland)	Wells; ---; 32	Edwards	1924
<i>quinquelineatus</i> Edwards	---; ---; 32	Edwards	1922
<i>ratcliffei</i> Marks	---; ---; 32	Stone	1961
<i>reesi</i> King & Hoogstraal	---; ---; 148	Steffan	1966
<i>roai</i> Belkin	Tree holes; ---; 283	Belkin	1962
<i>robinsoni</i> Belkin	Tree fern stump, tree hole; ---; 268	Belkin	1962
<i>rotanus</i> Bohart & Ingram	<i>Pandanus</i> leaf axils, tree holes, artificial containers; June, Oct.; 197°	Bohart	1957
<i>rotunae</i> Belkin	Tree holes, coconut shell, artificial containers; in the bush, bites man at night, suspected vector of filariasis; 107°	Belkin	1962
<i>rubiginosus</i> Belkin	---; ---; 283	Steffan	1966
<i>rubri thorax</i> (Macquart)	Woodlands, swamps, ground and rock pools, tree holes and artificial containers; commonly bites man in bushes; 32°	Dobrotworsky	1965
	---; day biter; 32°	Mackerras	1927a
	---; ---; 32	Edwards	1924
<i>rupestris</i> Dobrotworsky	Polluted rock pools in forest; bites by day; 32°	Dobrotworsky	1965

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES sagax</i> (Skuse)	Irrigated areas; Nov.-Apr.; 32 ---; in tussock near swamp, bite by day and dusk, June and Oct.; 32°	Dobrotworsky	1965
<i>saipanensis</i> Stone	Leaf axils of <i>Pandanus</i> and taro, tree holes, coconut shells, close to village on the shore of lake; bites man during day, July, Sept.-Oct.; 197°	Bohart	1957
<i>samoanus</i> (Grünberg)	---; ---; 1 ---; ---; 114, 283 (Leaf axils of taro and related plants)	Stone et al.	1959
	Leaf axils of taro, mat grass and <i>Pandanus</i> ; common, bites by night; 263°	Knight et al.	1944
	Leaf axils of <i>Colocasia</i> , <i>Alocasia</i> and <i>Cyrtosperma</i> ; ---; 263	Byrd et al.	1945
	---; artificial lights at night, in villages, suspected vector of filariasis; 263	Stone & Bohart	1944
<i>schlosseri</i> Belkin	Leaf axils of <i>Pandanus</i> , taro axils; ---; 283	Belkin	1962
<i>scutellaris</i> (Walker)	---; ---; 32, 83, 97, 114, 121, 134, 179, 219, 281, 308, 314 (Tree holes, artificial containers, transmits <i>Wuchereria bancrofti</i>)	Smart	1943
	Clear, fresh water occasionally with high organic content in artificial containers, coconut husks; bites readily especially on dull days, inside and outdoors, possible vector of filariasis; 50°	Laird	1946
	---; ---; 50, 66 (Artificial containers, coconut shells and husks, fallen coconut fronds, tree holes, rot holes on logs and split bamboo)	Steffan	1966
	Tree holes; Mar.; 66°. ---; possible vector of dengue; 148°, 220°. ---; Mar., Nov.-Dec.; 236°. ---; ---; 283° (Artificial containers, coconut shells, tree holes, puddles, spathes, leaves, leaf axils, wells, bites during the day in the shade, but feeds at dusk, readily enters buildings)	Bohart	1957
	Tree holes, old tires, clam shells, soapstone drains; Feb.; 107	Lever	1943a
	---; ---; 107*	Farner	1943

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES scutellaris</i> (Walker) (cont.)	Temporary collections of water, clear and stagnant, empty coconut shells, coconut leaves and fronds on the ground, artificial containers, shaded locations, rarely in puddles, leaf axils of <i>Pandanus</i> , rock pools, bamboo stumps, wells; bites by day in cool, shady place, in tents and buildings at dusk; 148°. ---; ---; 220	Penn	1947
	Half coconut shells and rot holes in trees containing water, water containers in native village, house tanks, beached canoes; ---; 148	Taylor	1934
	---; ---; 148, 220, 236, 283 (Coconut shells, husks, fallen fronds, tree holes, rot holes on fallen logs, in split bamboo, artificial containers, hovers about humans in shaded areas near habitations)	Knight & Hull	1952
	---; ---; 199	Edwards	1935
	Coconut husks and shells, tins, tree holes and concrete drains; ---; 263	Barraud	1934
<i>scutellaris andrewsi</i> Edwards	---; ---; 179	Taylor	1934 a
<i>scutellaris gurneyi</i> Stone & Bohart	---; ---; 283	Manson-Bahr	1959
<i>scutellaris hakanssoni</i> Knight & Hurlbut	---; ---; 66	Manson-Bahr	1959
<i>scutellaris hebrideus</i> Edwards	---; experimental vector of dengue; 32°. ---; ---; 148	Mackerras	1946
	---; ---; 220	Taylor	1934 a
	---; ---; 268, 283	Never	1934
<i>scutellaris hensilli</i> Farner	---; ---; 66	Manson-Bahr	1959
<i>scutellaris horrescens</i> Edwards	Tree holes in ivy swamp; enter houses, bites by day, Feb.-June; 107°	Paine	1943
	Tree holes in forest, coconut husk in plantation; ---; 107	Edwards	1935 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>scutellaris</i> <i>horrescens</i> Edwards (cont.)	Bamboo stumps, tree ferns, artificial containers; ---; 107	Lever	1945
<i>scutellaris</i> <i>katherinensis</i> Woodhill	Tree holes containing damp leaf-mould; ---; 107	Lever	1944
<i>scutellaris</i> <i>marshallensis</i> Stone & Bohart	---; ---; 32	Colless	1963
<i>scutellaris</i> <i>pernotatus</i> Farner & Bohart	---; ---; 121, 200	Manson- Bahr	1959
<i>scutellaris</i> <i>polyresiensis</i> Marks	---; ---; 220	Manson- Bahr	1959
<i>scutellaris</i> <i>pseudoscutellaris</i> (Theobald)	Taro pits, hollow tree stumps, coconut shells, artificial containers; bites day and night; 97° ---; possible vector of non-periodic filariasis; 97, 263, 308. Tree holes, coconut shells, leaf axils of <i>Apinia</i> , and taro plants, artificial containers; possible vector of filariasis and dengue, semi-domestic, common, Aug.-Oct., Dec.; 107. ---; suspected vector of dengue; 148	Venner Lever	1944
	Brackish water, stagnant stream, rock pools, rock holes, muddy swamp; bite by day and night, enter houses, Feb.-May; 107°	Paine	1943
	---; principal vector of filariasis; 107*, 263*	Levine & Harper	1947
	---; naturally infected with <i>Wuchereria bancrofti</i> ; 107*	Manson- Bahr	1959
	---; ---; 107, 199, 263, 281 (Broken coconut shells, intermediary host of non-periodic <i>W. bancrofti</i>)	Taylor	1938
	Fresh water, artificial containers, coconut shells, tree holes, fallen leaves; domestic daytime biter in shade; 197°	Farner	1944
	Coconut hulls; ---; 197. ---; ---; 205*	Farner	1944 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>scutellaris</i> <i>pseudoscutellaris</i> (Theobald) (cont.)	---; common, bites by day; 199°*	Mumford & Adamson	1934
	Artificial containers, opened coconuts, sagging canvas, fallen leaves, rot holes in trees; bites by day in dense shade, common, rests in grass, vines, under brush, beneath houses; 263°	Byrd et al.	1945
	Coconut husks, natural and artificial containers of pure water; enters houses, attack man by day, among vegetation by night, naturally infected with <i>Wuchereria bancrofti</i> ; 281°. ---; ---; 289 (Vector of filariasis)	Galliard et al.	1949
<i>scutellaris</i> <i>quasiscutellaris</i> Farner & Bohart	---; ---; 283	Manson- Bahr	1959
<i>scutellaris</i> <i>scutellaris</i> (Walker)	---; ---; 32, 66, 220 ---; ---; 50, 148, 236, 283 (Coconut shells, tree holes, leaf axils, split bamboo, puddle, well, artificial containers, bites man). ---; carrier of dengue; 148	Colless	1963
	Cup fungus, coconut husks; ---; 148	Marks	1954
		King & Hoogstraal	1946
<i>scutellaris</i> <i>scutoscriptus</i> Bohart & Ingram	---; ---; 66	Manson- Bahr	1959
<i>scutellaris</i> <i>tongae</i> Edwards	---; ---; 114*	Manson- Bahr	1959
	---; ---; 268	Lever	1934
<i>scutellaris</i> var. <i>variegatus</i> Doleschall	---; ---; 283*	Lever	1934
<i>scutoscriptus</i> Bohart & Ingram	Tree holes, artificial containers; Jan., July, Nov.-Dec.; 66 ---; ---; 283 (Tree holes, artificial containers, possible vector of non-periodic filariasis)	Bohart	1957
		Marks	1954
<i>sentanius</i> King & Hoogstraal	Hog wallow in sago swamps, shallow boot prints in dense forest; April-June, Dec.; 148	Steffan	1966
<i>senyaviniensis</i> Knight & Hurlbut	Common in clear water, axils of palms, artificial containers; trap, Jan.-Feb., July; 66	Bohart	1957

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>silvestris</i> Dobrotworsky	Pools with clear or cloudy water exposed to the sun; bites by day and bites only after sunset during hot weather, Mar., Aug.-Nov.; 32°	Dobrotworsky	1965
<i>similis</i> (Theobald)	---; ---; 32, 148 (Clear pools in marshes) ---; vicious, persistent day biters in shaded jungle and rain forest; 50° ---; ---; 50	Lee Laird Steffan	1944 1946 1966
<i>simplicus</i> King & Hoogstraal	---; edge of forest; 148	Steffan	1966
<i>solomonis</i> Stone & Bohart	Axils of swamp plants; ---; 283 Leaf axils of <i>Pandanus</i> ; ---; 283	Stone & Bohart Steffan	1944 1966
<i>spilctus</i> Marks	Ground pools, shallow and grassy, exposed to the sun or partly shaded with clear or cloudy water; bites by day; 32°	Dobrotworsky	1965
<i>spinosipes</i> Edwards	---; ---; 32	Edwards	1922 a
<i>stanleyi</i> Peters	Tree holes; ---; 148	Steffan	1966
<i>stricklandii</i> Edwards	---; ---; 32 ---; bites by day; 32°	Edwards Dobrotworsky	1924 1965
<i>subalbirostris</i> Klein & Marks	---; in a hotel; 222	Belkin	1962
<i>subalbitarsis</i> King & Hoogstraal	Shaded rock pools, log holes; ---; 148 Rot holes and artificial containers; ---; 148	Steffan Knight & Marks	1966 1952
<i>subauridorsum</i> Marks	Tree stump; bites in open rain forest in late afternoon; 32° ---; ---; 32	Marks Knight & Marks	1948 1952
<i>subfuscus</i> Dobrotworsky	Rock pools in river and creek beds with vegetation exposed to the sun or partly shaded; bites by day; 32°	Dobrotworsky	1965
<i>sticticus</i> Stone & Bohart	Crabholes; ---; 107	Stone & Bohart	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES tasmaniensis</i> Taylor	---; ---; 32	Lee	1944
<i>theobaldi</i> (Taylor)	Clear or slightly muddy grassy gutters and hoof-prints; bites day and night in forest, scrub or open country, indoors; 32°	Marks	1949
	Clean or cloudy pools, ditches with grassy edges, irrigated areas; common, all year; 32	Dobrotworsky	1965
<i>theobaldi eidsvoldensis</i> Mackerras	---; bites indoors at dusk and night; 32°	Marks	1949
	---; bites by day; 32°	Mackerras	1927
	---; May-Aug.; 32	Minter	1950
<i>tongae</i> Edwards	Coconut husks, tree holes and wells; ---; 1	Farner et al.	1946
	---; suspected vector of non-periodic filariasis; 114. ---; ---; 283 (Coconut husks and tree wells)	Farner & Bohart	1945
	---; ---; 114°	Belkin	1962
	---; ---; 281	Knight et al.	1944
<i>toxopeusi</i> Bonne-Wepster	At 3800 meters elevation; ---; 148	Bonne-Wepster	1948
<i>tremulus</i> (Theobald)	Wells, casks, tree holes; ---; 32	Edwards	1924
	Artificial containers; ---; 32°	Dobrotworsky	1965
	-- -; 50, 148 (Tree holes, wells, artificial containers)	Knight et al.	1944
	Tree holes; ---; 14°	Edwards	1924
<i>trispinatus</i> King & Hoogstraal	---; ---; 148	Steffan	1966
<i>trukenensis</i> Bohart	---; ---; 66	Bohart	1957
<i>tsiliensis</i> King & Hoogstraal	Tree holes; ---; 148	Steffan	1966
<i>tubbutiensis</i> Dobrotworsky	Back waters in creek beds, rock pools exposed to the sun, in wooded country at 1,800 feet elevation; ---; 32	Dobrotworsky	1965

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES tulagiensis</i> Edwards	<i>Pandanus</i> leaf axil, tree hole; ---; 268	Belkin	1962
<i>tulliae</i> Taylor	Creek bed containing pot holes of water; open forest country, bites man in late afternoon; 32° ---; ---; 32	Taylor Knight et al.	1929 1944
<i>turneri</i> Marks	---; ---; 32	Stone	1963
<i>uniformis</i> (Theobald)	---; ---; 32	Cooling	1924 a
<i>upolensis</i> Marks	Hole in top of tree fern stump; ---; 263°	Belkin	1962
<i>vandemae</i> (Strickland)	---; ---; 32	Edwards	1924
<i>variegatus</i> Doleschall	---; ---; 32, 50, 107, 114, 148, 219, 220, 222, 283 (Old coconut husks and cacao pods) ---; ---; 50, 148 (Half coconuts, rot holes in trees, wells in native gardens and beached canoes, in houses and huts, common and diurnal) ---; ---; 97, 121, 245	Edwards Hill Roy & Brown	1924 1925 1954
	Trec holes, crabholes, coral rock pools, coconut husks and shells with leaves, leaf axils of <i>Colocasia indica</i> , wells, artificial containers; ---; 107. Wells in palms, coconut and bamboo stump, cacao pods, crabholes, drains, holes in lava, artificial containers; ---; 263	Paine	1934
	---; ---; 107, 148*, 179, 219 (Fresh water with decaying vegetable matter chiefly in holes and crevices in trees, in cracks in lava, coconut holes, husks and shells, rest in dry holes, under leaves and bark of trees and in houses by night, intermediate host of <i>Wuchereria bancrofti</i> , bites by day)	Cilento	1924
	---; ---; 107*	Edwards	1922
	Tanks, guttering and other domestic waters; Dec.; 148	Holland	1933
	Tree rot holes; ---; 263	Buxton	1926

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i>			
<i>variegatus</i> (Doleschall) (cont.)	In forests; ---; 263	Buxton & Hopkins	1925
	Open coconut husks containing water, leaf axils of Taro, wild in path of forest, tree holes, artificial containers; bites occasionally; 283°	Paine & Edwards	1929
<i>variegatus</i> var. <i>hebridius</i> Edwards	Tree holes, coconut shells; bite by day; 220°	Buxton & Hopkins	1927
<i>variegatus</i> var. <i>pseudoscutellaris</i> (Theobald)	---; ---; 83, 199, 261, 308. Coconut shells, small cavities in trees, tree-wells; ---; 97. ---; main carrier of non-periodic filariasis; 107. ---; carrier of non-periodic filariasis; 263 ---; common in plantations and forest areas, bites by day; 107°	Buxton & Hopkins	1927
	Coconut husks and shells, rot holes in trees, small tins, cacao pods, concrete drains, in small dark places containing water with organic content; ---; 263°	Paine & Edwards	1929
<i>variegatus</i> <i>tongae</i> Edwards	Coconut husks and tree wells; possible vector of filariasis; 114.	Edwards	1928
	---; ---; 114*	Manson-Bahr	1959
<i>variegatus</i> (Bigot)	Coconut and cocoa shells, tree holes, shells; ---; 148	Brug	1931
<i>variepictus</i> King & Hoogstraal	Tree holes; ---; 148	Steffan	1966
<i>varuae</i> Belkin	---; ---; 268, 283 (Tree fern stumps, log holes, coconut shell, fallen <i>Pandanus</i> leaf, and rain barrels)	Steffan	1966
<i>vexans</i> Meigen	---; ---; 32, 107, 114, 148, 219, 220, 263 (Temporary ground pools, roadside ditches, foul water, grassy pools) ---; bite by day; 97°. Shallow water; ---; 107. Tree wells; ---; 114. Shallow pools; ---; 263	Knight et al.	1944
	Pond margins, rain pools, hoof marks, among grass and vegetation; bites by night, common; 107°	Buxton & Hopkins	1927
	Ditch, puddles, ponds; enters houses, Jan.-Feb.; 107	Paine	1943
	---; ---; 148, 219, 263 (Wheel ruts, bomb craters, marsh pools with vegetation, creekbed pools)	Lever	1943 a
		Lee	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES vexans</i> Meigen (cont.)	---; experimentally transmits Japanese "B" encephalitis; 179	Hammon et al.	1949
	Fresh water pools, ruts; ---; 219	Perry	1950
	Temporary rain puddles, grassy swamps, drainage ditches; ---; 220	Perry	1946
	Artificial container among rocks; night and day biter; 222°	Graham	1939
	On and near coast; ---; 263 (Always in shallow temporary pools and marshes)	Edwards	1928
	---; abundant and annoying in jungle and coconut-grove area, bites by day; 283°	Oman & Christenson	1947
<i>vexans nocturnus</i> (Theobald)	---; ---; 32, 107, 148, 219, 220. Tree hole; ---; 114. Temporary rainwater pools, artificial containers; bite at night; 197°. ---; edge of woods at dawn; 200. Partially dried marshes, pig wallows, roadside ditch; ---; 263 (Temporary rain pools, road ruts, roadside ditches, grassy depressions, bite day and night)	Bohart & Ingram	1946
	---; July-Aug.; 66°. ---; bites by day, Mar., June, Sept.-Dec.; 197°. ---; indoors, Dec.; 236° (Ground pools, rain barrels, coconut shells, artificial containers, bloodsucker at night and by day)	Bohart	1957
	---; ---; 97	Stone et al.	1959
	Rainpools with vegetation, marshy hoofprints; ---; 197	Yamaguti & La Casse	1950
<i>victoriensis</i> Taylor	---; ---; 32	Cooling	1924 a
<i>vigilax</i> (Skuse)	Mangrove swamps; enter houses, abundant and most annoying, bite day and night; 32°	Mackerras	1928
	Brackish water, salt marshes, fresh water ground pools; ---; 32	Dobrotworsky	1965
	Tea-tree swamp; ---; 32	Bearup & Laurence	1947
	---; ---; 32, 148 (Fresh and brackish water swamps, sometimes in salt water, fierce biter, especially in the afternoon, relatively poor host of <i>Wuchereria bancrofti</i>)	Taylor	1943 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES vigilax</i> (Skuse) (cont.)	---; enter houses, March; 107 (In salt water)	Lever	1940
	---; ---; 107°	Paine	1943
	---; ---; 107, 148, 219, 220, 283 (Salt or brackish water or fresh water, ground pools, tidal swamps, holes in mangrove trees, artificial containers, bites man)	Steffan	1966
	Brackish marsh; ---; 148	Lee	1944
	---; suspected vector of non-periodic filariasis; 183. ---; vector of non-periodic filariasis; 219* (Brackish water in mangrove swamps and salt marshes, also in rock holes and fresh water ground pools, attack man day and night)	Belkin	1962
	Salt and brackish marshes; ---; 219	Oman & Christenson	1947
	---; common and possible vector of dengue; 219	Perry	1948
	---; naturally infected with <i>Wuchereria bancrofti</i> ; 219	Raghavan	1961
	---; bites day and night, common; 219°	Perry	1950
	Salt water pool; bites viciously during day; 220°	Perry	1946
<i>vittiger</i> (Skuse)	Sunlit clear or cloudy pools with grassy edges, wells; bites by day; 32°	Dobrotworsky	1965
	Clear or muddy water holes, in forest country and near river; sandstone gullies, Jan. and Dec., rare; 32	Mackerras	1927 a
	Margins of small muddy waterholes; ---; 32	Lee	1944
<i>wallacei</i> Edwards	---; May; 32	Minter	1950
	---; ---; 32 (Axils of <i>Pandanus</i> , banana, taro and pineapples, enters houses and bites man at night)	Steffan	1966
	Leaf axils of <i>Pandanus</i> ; common, enters houses, bites man, especially by night, Jan.-Feb.; 50°	Taylor	1934
	Leaf axils of banana, taro and pineapple; enters houses at night; 148°	Marks	1948
<i>wasselli</i> Marks	Shallow, swampy creek with dense vegetation; ---; 32	Marks	1948

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AEDES</i> <i>wattensis</i> Taylor	---; bites in late afternoon; 32°	Taylor	1929
	---; ---; 32	Dobrotworsky	1965
<i>wilsoni</i> (Taylor)	---; bites by day; 32°	Ferguson	1926a
<i>zonatipes</i> Walker	---; ---; 32, 148, 236. Artificial containers; ---; 66. Partly brackish elevated coral rock holes, containing dead leaves; ---; 220 (Coconut shells, tree holes, artificial containers)	Bohart & Ingram	1946
<i>AEDEOMYIA</i> <i>catasticta</i> Knab	Swamps with vegetation; ---; 32	Lee	1944
	---; ---; 32, 66, 148, 197, 283 (In marshy ponds, irrigation reservoirs, along grassy banks of coastal lagoons in full sunlight with dense vegetation)	Delfinado	1966
	Swamps, underwater stems of <i>Nitelia</i> ; Mar., July, Aug., Nov., Dec.; 66. ---; at light, all year; 236	Bohart	1957
	Swampy grounds, river margins with algae; ---; 107	Lever	1945
	Grassy banks of small coastal sunlit lagoon anchored in algae within dense vegetation; ---; 283	Belkin	1962
<i>venustipes</i> (Skuse)	Permanent swamps, vegetated dams and pools; all year; 32	Dobrotworsky	1965
	---; enter houses; 32	Hill	1922
<i>AEDIMORPHUS</i> <i>australis</i> var. <i>dorrini</i> Taylor	---; rare, enter houses, Dec.; 32°	Hill	1917
<i>ANISOCHELEOMYIA</i> <i>nivipes</i> Theobald	---; indoors, May; 32	Hill	1922
	---; July; 32	Taylor	1913
<i>ANOPHELES</i> <i>aconitus</i> Donitz	---; ---; 148* (Rice fields, fresh water ponds, canals and occasionally in streams)	Wilcocks	1944
<i>aitkenii</i> James	---; ---; 148	Stone et al.	1959
<i>aitkenii</i> <i>aitkenii</i> James	---; ---; 148 (Shaded vegetation at the edge of flowing streams, springs and marshes)	Lee & Woodhill	1944
<i>aitkenii</i> var. <i>papuae</i> (Swellengrebel & Swellengrebel)	---; ---; 148	Christophers	1924

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES amictus</i> Edwards	Sunny or shaded, fresh, muddy running water in pools, trenches, swamp margins with green algae, rock pools, artificial containers; experimentally infected with malaria and <i>Wuchereria bancrofti</i> ; 32°	Bonne-Wepster & Swellen-grebel	1953
	Associated with green algae in running water; bites after dusk, March-June; 32°	Mackerras	1927
	Fresh and brackish water; enter houses, possible vector of malaria; 32°	Covell	1944
	---; ---; 32*	Raghavan	1961
	---; ---; 32, 148 (Permanent and sunlit waters, intermediary host of <i>Wuchereria bancrofti</i>)	Taylor	1938
	---; ---; 32, 148 (Muddy or clear hoofprints, grassy channels, clogged street gutters)	Knight et al.	1944
	In pools with green algae and running water; enter houses and readily bites man; 148°	Russell et al.	1943
<i>amictus</i> <i>amictus</i> Edwards	Shallow muddy pools, exposed or partly shaded to sunlight, swamp margins, among green algae in fresh running water, rock pools, slit trenches, rarely in brackish water; experimentally infected with <i>Wuchereria bancrofti</i> ; 32°	Lee & Woodhill	1944
	---; experimentally infected with <i>Plasmodium vivax</i> , <i>P. falciparum</i> , <i>P. malariae</i> , bites man in captivity; 32°	Mackerras & Roberts	1947
	---; experimental transmission of malaria, abundant in Feb.-Apr.; 32 (Hoof-holes at the edge of billabongs, soakage holes in dry riverbeds, permanent water holes, drainage and ornamental pools, artificial containers)	Black	1950
<i>amictus</i> <i>hilli</i> Woodhill & Lee	Polluted and brackish water, salt water pools, inland muddy pools, slit trenches and shallow weedy margins of fresh water swamps, exposed and partly shaded; naturally and experimentally infected with malaria, enters houses and tents, active after sunset; 32°	Lee & Woodhill	1944
	---; Jan.-April; 32°. ---; around swamp, May-July; 148°	Roberts & O'Sullivan	1948
	---; experimentally infected with <i>Plasmodium falciparum</i> ; 32°	Mackerras & Roberts	1947
	---; ---; 32, 148 (Sunny or shaded, fresh, brackish, salt, polluted, muddy water in pools, trenches, swamp margins, artificial containers; enters houses and tents, bites after sunset, naturally and experimentally infected with malaria)	Bonne-Wepster & Swellen-grebel	1953

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES</i>			
<i>annulatus</i> de Rook	Small stream in jungle swamp; ---; 148	Steffan	1966
<i>annulipes</i> Walker	Shallow stagnant pools in creek beds, lagoons, wells, irrigation channels, hoof-holes; bite day and night, indoors, active from dusk until day break, all year; 32°	Hill	1922
	Clean or muddy, ground water, casual or permanent, along banks of creeks and rivers; enter houses, capable of transmitting benign tertian malaria; 32	Taylor	1943a
	Small swamps, soakage and rock pools, clear fresh running water with vegetation; rarely in houses, probable vector of malaria; 32	Mackerras	1928
	Gravel beds on creek banks, swamp margins, wheel tracks, slit trenches, brackish, weedy ponds, artificial containers; experimental transmission of malaria; 32. ---; bites after sunset; 148°	Lee & Woodhill	1944
	Ground pools with vegetation shaded and exposed to the sun, fresh and brackish, clear and slightly muddy water; ---; 32	Dobrotworsky	1965
	---; common, experimentally infected with <i>Plasmodium vivax</i> , <i>P. falciparum</i> and <i>P. malariae</i> ; 32	Mackerras & Roberts	1947
	---; ---; 32*	Taylor	1938
	---; ---; 50*	Manson-Bahr	1959
	In shaded pools in intermittent stream beds, side pools of flowing streams, grassy seepage or overflow areas; ---; 148 (Ground pools of limited depth, rock pools with algae, open or partially shaded fresh or brackish water)	Boyd	1949
<i>annulipes</i> <i>annulipes</i> Walker	Shallow grassy pools, among vegetation on marshy edges, creek, surface wells, rock pools and occasionally brackish water; enter houses; 32*. ---; ---; 148*	Russell et al.	1943
<i>annulipes</i> <i>mastersi</i> Skuse	---; ---; 32	Russell et al.	1943
<i>annulipes</i> var. <i>moluccensis</i> Swellengrebel	Brackish drains and swamps; ---; 50, 283	Buxton & Hopkins	1927

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES atratipes</i> Skuse	Sluggish, slightly muddy creeks with fine silt bottom, with some aquatic vegetation; sylvan day-biter, Sept.; 32°	Mackerras	1927
	Sandstone gullies, sluggish streams with sandy bottoms; in forest, rare; 32	Russell et al.	1943
	Tea-tree swamps; Oct.-Feb.; 32	Dobrotworsky	1965
	Fresh water swamps with or without vegetation, rock pools; ---; 32	Bonne-Wepster & Swellen-grebel	1953
	---; common; 32	Taylor	1946
<i>atrides</i> (Skuse)	---; ---; 32	Ferguson	1926
<i>bancroftii</i> Giles	Shallow, slow-moving water overgrown with vegetation; rarely enter houses, bites in the evening; 32*, 148*	Russell et al.	1943
	Shaded swamps; bites in and out of doors; 32°. Old, cut-off course of river shaded by reeds, algae, <i>Azolla</i> ; bites man in and out of doors, suspected vector of malaria; 148°	Bonne-Wepster & Swellen-grebel	1953
	---; possible carrier of malaria; 32	Ferguson	1926
	---; ---; 32, 50, 148 (Large bodies of water with vegetation, occasionally in ditches and canals)	Bohart	1945
	---; ---; 32, 148 (Semi-shaded permanent and casual water, intermediary host of malaria)	Taylor	1938
	Partially shaded clear lakes with vegetation; ---; 148*	Farner	1943
	---; Sept., Oct., naturally and experimentally infected with <i>Wuchereria bancrofti</i> ; 148	Elsbach	1937
	---; ---; 148*	Manson-Bahr	1959
<i>bancroftii</i> <i>bancroftii</i> (Giles)	---; experimentally infected with <i>Plasmodium vivax</i> and <i>P. falciparum</i> ; 32	Mackerras & Roberts	1947
	---; in and outdoors; 32°. ---; ---; 148° (Swamps, in heavy woods and dense aquatic growth)	Boyd	1949

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>Anopheles bancroftii</i> <i>bancroftii</i> (Giles) (cont.)	---; experimental transmission of malaria, Feb.-Apr.; 32 (Hoof-holes at the edges of billabongs, soakage holes in dry river beds, permanent water holes, drainage and ornamental pools, artificial containers)	Black	1950
<i>bancroftii</i> <i>pseudobarbirostris</i> Ludlow	Sago and other swamps, heavy vegetation along margins of lagoons and sluggish streams, heavy woods and dense aquatic growth; ---; 148°	Boyd	1949
	Clear pools with aquatic vegetation in shade and with little sunlight in forest; ---; 148	Lee & Woodhill	1944
	---; at 100 meters elevation, Apr.; 148	Bonne-Wepster	1948
<i>barbirostris</i> van der Wulp	---; common; 32	Taylor	1918
	---; naturally and experimentally infected with <i>Wuchereria bancrofti</i> and <i>W. malayi</i> , natural vector of <i>W. bancrofti</i> and experimental vector of <i>W. malayi</i> ; 148	Raghavan	1961
	---; ---; 148 (Slowly running streams, swamps, ditches and wells with much vegetation, in houses, occasionally bites man)	Steffan	1966
	---; ---; 148 (Shaded clear water of streams and rivers, vegetated ponds and pools, borrow pits, ricefields, wells, salt water swamps, rarely enter houses)	Russell et al.	1943
	---; ---; 148 (Flowing ditches, canals, borrow pits, ricefields, wells, salt water swamps, bites in shade in day, experimentally infected with <i>Plasmodium vivax</i>)	Simmons & Aitken	1942
	---; ---; 148 (Semi-shaded permanent and casual water, intermediary host of malaria)	Taylor	1938
<i>barbirostris</i> var. <i>bancroftii</i> Giles	Sluggish streams and fresh water swamps with much vegetation; bites day and night, rarely indoors; 32°	Hill	1922
	Shade banks of small lakes; ---; 148**	Wilcocks	1944
<i>barbirostris</i> <i>barbirostris</i> van der Wulp	---; ---; 148 (Ponds, pools, and ricefields with vegetation, bites man)	Hsiao	1945
<i>barbumbrosus</i> Strickland & Choudhury	Partially shaded stagnant water; ---; 148	Lee & Woodhill	1944
	---; ---; 148 (Slow springs in jungle, ricefields, clear and sunny grass fringed streams, shaded stagnant water)	Bonne-Wepster & Swellen-Grebel	1953
	---; ---; 148 (Vector of malaria)	Farmer	1943

TABLE I - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES</i>			
<i>breinli</i> Taylor	---; ---; 32	Knight et al.	1944
<i>clowi</i> Rozeboom & Knight	Road rut, pools, ditches in sunlight; ---; 148 ---; ---; 283	Bonne-Wepster & Swellen- grebel Boyd	1953 1949
<i>colledgei</i> Marks	---; ---; 32	Stone et al.	1959
<i>corethrroides</i> Theobald	---; ---; 32	Christophers	1924
<i>cristatus</i> King & Baisas	---; ---; 148 (Small rock holes in dense shade)	Steffan	1966
<i>derricki</i> Taylor	---; ---; 32	Knight et al.	1944
<i>ferranti</i> Laveran	---; ---; 32*, 50*, 148*, 220*, 283* ---; ---; 32, 50, 148, 220. ---; naturally infected with <i>Wuchereria bancrofti</i> ; 268*. ---; infected with microfilaria of <i>W. bancrofti</i> , naturally and experimentally infected with <i>W. bancrofti</i> ; 283 (River and stream margins with vegetations, springs, seepage areas, ponds, lagoons, and temporary ground pools of all sizes in open coastal areas or in wide river valleys, tolerant to organic pollution and brackish water, artificial containers, highest density in areas occupied by man and abundant in wells, taro gardens, ditches and temporary rainpools, feed on man, enter dwellings, repelled by artificial light, important vector of malaria, efficient vector of filariasis)	Russell Belkin	1956 1962
	---; edge of rain forest, Jan.-June; 148. ---; bed nets, indoors; 220, 283 (Semi-shaded pools with flotage, trailing or emergent vegetation or algae, in fairly thick woods, in vegetation or algae mats along streams and brackish pools, lagoons and mangrove swamps near coast, in saline water, holes in fallen tree trunks, coconut shells, artificial containers, bites man at night in houses)	Boyd	1949

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES farauti</i> Laveran (cont.)	---; naturally and experimentally infected with <i>Wuchereria bancrofti</i> ; 148*. ---; naturally infected with <i>W. bancrofti</i> ; 283 ---; naturally infected with malaria, coastal regions, 800-2250 meter elevation; 148	Raghavan	1961
	Common at 1,100 feet elevation, in rivers, streams, springs, taro gardens, seepage areas, ponds, lake, swamps, marshes, open wells and brackish water, during rainy season, in temporary pools, puddles and road ruts; in houses, artificial shelters, naturally infected with <i>Wuchereria bancrofti</i> , possible vector of malaria, bite man usually at night, all year; 220°	Bonne-Wepster & Swellen-grebel	1953
	Bases of uprooted trees, borrow pits, ditches, hog wallows, coral pools with vegetation during rainy season, occasionally in coconut halves, tree holes, plant axils, potholes with floating mats of duckweed-Lemna; resting in tree buttresses in shaded jungle areas; 220*	Daggy	1945
	Along coast, among roots of banyan trees, weeds and grass, artificial containers, on shaded moist walls, moist situations beneath large felled logs; ---; 220. Along coast; in native huts and tents under extremely high temperature in middle of the day; 283 (River and stream margins with vegetation, springs, wells, seepage areas, taro gardens, ponds, lagoons and swamps, all in open coastal areas, puddles, hog wallows, ruts, holes, hoofprints and bases of uprooted trees, bites outdoors from dusk to dawn, rests by day in cool moist shaded spot)	Belkin et al.	1945
	Roadside ruts, fox holes, bomb craters, slit trenches, borrow pits, pools in shaded mangroves, water exposed to sun; ---; 220°. ---; rarely in houses, during day, active at night; 283	Farner et al.	1946
	---; ---; 220°, 283°. In sunny, slightly brackish lagoons with emergent vegetation or flotage, temporary water catchments of many kinds, streams, river, ponds, seepage areas, open wells, fresh and tidal swamps and lagoons, man-made catchments, "fox holes", borrow pits, road ditches; by night found in dark portions of native huts or closed tents, by day in cool, moist, shaded places, most important malaria vector; 289*	Oman & Christenson	1947

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES farauti</i> Laveran (cont.)	Ruts and holes; Aug.-Nov.; 283. ---; ---; 289 (In houses to bite man, vector of malaria)	Harper et al.	1947
	Exposed margins of stream, man-made catchments; in native huts; 283	Perry	1949
	---; bites by night; 283°	Levine & Harper	1947
	---; naturally infected with filaria; 283	Schlosser	1949
<i>farauti</i> <i>farauti</i> (Laveran)	---; ---; 32, 50, 148, 220, 283 (Many types stagnant and slow water, sometimes brackish, coconut shells, artificial containers, prefers open country)	Knight et al.	1944
<i>farauti</i> <i>moluccensis</i> Swellengrebel & Swellengrebel de Graaf	---; ---; 148 (All types water, brackish, fresh, running, stagnant, clean, dirty, coconut shells, artificial containers, in shade or sun,	Knight et al.	1944
<i>incognitus</i> Brug	---; ---; 148	Steffan	1966
<i>insulaeflorum</i> (Swellengrebel & Swellengrebel de Graaf)	---; ---; 148 (In quiet, shaded forest streams, often among debris in small nooks where the water is stagnant, also in exposed situations, seldom comes in contact with man)	Simmons & Aitken	1942
	---; naturally infected with <i>Wuchereria bancrofti</i> ; 203	Raghavan	1961
<i>jeyporiensis</i> <i>koliensis</i>	---; naturally infected with <i>Wuchereria bancrofti</i> ; 203	Manson-Bahr	1959
<i>karwari</i> (James)	Sunlit wheels rut along edge of bog, natural depressions, shallow water around grass stems, pitcher plants, shell holes; inside tents, attracted to lights, experimentally infected with malaria, bites readily after dark, Mar.- June; 148°	King & Hoogstraal	1946 a
	---; natural and experimental vector of <i>Wuchereria bancrofti</i> ; 148*	Raghavan	1961
	---; naturally infected with <i>W. bancrofti</i> ; 148*	Manson-Bahr	1959

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>Anopheles karwari</i> (James) (cont.)	---; ---; 148*	Russell	1956
	---; ---; 148 (Little streams, springs, seepage areas, ricefields, ponds, in houses, experimentally infected with <i>Plasmodium falciparum</i>)	Bonne-Wepster & Swellen-grebel	1953
<i>koliensis</i> Owen	---; ---; 50, 148. Temporary pools in grasslands, along edge of jungle and where exposed to sunlight; in tents, huts, active all night, peak after midnight, naturally infected with <i>Wuchereria bancrofti</i> ; 283	Belkin	1962
	---; Apr., July; 148	Bonne-Wepster	1948
	---; ---; 148, 283 (Semi-shaded pools with flotage, trailing or emergent vegetation or algae, in fairly thick woods, vegetation or algae mats along streams, brackish pools, lagoons and mangrove swamps near coast, in saline waters, holes in fallen tree trunks, coconut shells, artificial containers, bites man at night indoors)	Boyd	1949
	---; ---; 148, 283 (Sunny, temporary and permanent pools at edge of jungle and grasslands, enters houses, nocturnal, possible carrier of malaria)	Bonne-Wepster & Swellen-grebel	1953
	Temporary pools along the edge of the jungle, prefer water exposed to sunlight; rests during day in native huts, greatest activity after midnight; 283°	Owen	1945
	---; naturally infected with <i>W. bancrofti</i> ; 283	Raghavan	1961
	---; ---; 283*	Harper et al.	1947
	Alluvial plain area; possible vector of malaria; 289	Oman & Christenson	1947
<i>longirostris</i> Brug	---; ---; 50, 93, 148 (Swamps, overgrown back waters, seepage pools, wheel ruts, pig wallows, usually in shaded areas, bites man)	Steffan	1966
	Overgrown back waters, sago swamps, seepage pools, wheel tracks, pig sty, shaded or sunny, in or near jungle; in houses; 148°	Bonne-Wepster & Swellen-grebel	1953
	Sago swamps, shallow grassy marginal pools, clearing in swamps, pools in jungle or semi-open woods; ---; 148	Boyd	1949

TABLE I - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES longirostris</i> Brug (cont.)	Swampy pools in jungle, near river banks exposed or shaded in sunlight; ---; 148	Lee & Woodhill	1944
	---; experimentally infected with <i>Plasmodium vivax</i> and <i>P. falciparum</i> ; 148	Mackerras & Roberts	1947
<i>longirostris</i> var. <i>annulata</i> de Rook	Swamp with vegetation and low growth in the jungle; ---; 32*	Lee & Woodhill	1944
<i>lungue</i> Belkin & Schlosser	---; ---; 32*	Geigy & Herbig	1955
	Sago swamp; May; 148	King & Hoogstraal	1946 a
	---; ---; 148, 283 (Shaded, clear and cool water, jungle seepages, stream margins, pot holes and stream beds, rock holes, dense jungle swamps, temporary pools, muddy hog wallows, during rainy season, in coconut groves on coastal strip, rest in damp or wet places, partially or fully shaded, in jungle)	Bonne-Wepster & Swellen-grebel	1953
	Seepage areas in jungle, along margins of streams, pot holes in stream beds, rock holes, temporary pools, prefers shade, "fox holes", hog wallows, old steel helmet, swamps, and coastal lagoons at mouths of streams, cool and clear water with high organic content; rest on trunks and buttresses of large trees in swampy jungle; 283	Belkin et al.	1945
	Coastal swamps and seepage areas, in shade; ---; 289	Oman & Christenson	1947
<i>maculipennis</i> Meigen	---; on a ship in May and Sept.; 222	Graham	1939
<i>mastersi</i> Skuse	---; ---; 32	Edwards	1924
<i>meraukensis</i> Venhuis	Margins of grassy swamps in open country, muddy and clear pools, hoof mark with or without algal growth, in polluted brackish water, back waters of rivers, exposed or partially shaded; indoors at daytime, active after sunset, abundant in Mar.-Apr.; 32°	Lee & Woodhill	1944
	---; experimentally infected with malaria; 32. Shallow pools in swamp, ditches, wheel ruts with algal, rain flooded ricefields, fresh, unshaded water; in houses; 148	Bonne-Wepster & Swellen-grebel	1953
	---; experimentally infected with oöcysts of <i>Plasmodium vivax</i> ; 32	Mackerras & Roberts	1947

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES nataliae</i> Belkin	Densely shaded springs, seepage areas, small creeks in the coral foothills, on top of floating vegetation or debris and margins of creeks with swift current, jungle streams at the point of emergence from coral caves; ---; 283	Belkin	1962
<i>novaguinensis</i> Vanhuis	Pools in sago swamp; enters houses, bites at sundown; 32°	Lee & Woodhill	1944
	Clear, shallow, sunlit water with abundant algal growth; ---; 32. Small pool in sago wood; ---; 148 (Bites in and out of doors at sundown)	Bonne-Wepster & Swellen-grebel	1953
<i>palmatus</i> (Rodenwaldt)	---; ---; 148 (Edges of streams, rivers, in swamps, seepage pools and rock holes, shaded with vegetation)	Steffan	1966
<i>papuensis</i> Dobrotworsky	Semi-rock pools, clear, well-shaded streamside pool with emergent vegetation; ---; 148	Steffan	1966
<i>perplexus</i> Taylor	River and creek; enters houses; 32°	Taylor	1943
<i>perplexus</i> <i>perplexus</i> Taylor	---; ---; 32	Knight et al.	1944
<i>perplexus</i> <i>persimilis</i> Taylor	---; ---; 32	Knight et al.	1944
<i>powelli</i> Lee	Shaded shallow swampy pools with vegetation; indoors; Lee 32 ---; rare; 32°	Lee Boyd	1944 a 1949
<i>pseudobarbirostris</i> Ludlow	---; ---; 32 ---; ---; 148 (Clear, sunny or densely shaded pools with aquatic vegetation in jungle) ---; ---; 148 (Vector of malaria)	Smart Bonne-Wepster & Swellen-grebel Farner	1943 1953 1943
<i>pseudostigmaticus</i> Dobrotworsky	Grassy edges of swamps with clean water in ground and rock pools exposed to the sun; ---; 32	Dobrotworsky	1965
<i>punctulatus</i> D8nitz	---; ---; 32, 50, 220, 268, 283 (Carrier of malaria) ---; ---; 32, 50. ---; ---; 148 (Sunlit natural and artificial waters, banks of rivers and creeks, with or without vegetation, drains, trenches, swamps, hoofprints, puddle holes and sometimes brackish water pools, enter houses, bite by day if sky is overcast)	Kumm Taylor	1929 1943 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES punctulatus</i> Dönnitz (cont.)	Temporary rain pools, small depressions, and roadside puddles; ---; 50. Seepage, running grass-covered plantation drains, beached canoes; ---; hole, dammed up stream, hot spring; ---; 220 ---; ---; 50*	Lever	1942
		Manson-Bahr	1959
	Collections of exposed water; ---; 148*	Wilcocks	1944
	---; carrier of all three species of <i>Plasmodium</i> ; 148. Sluggish stream with filamentous algae, taro swamp, stagnant swamps; ---; 220°. ---; ---; 263	Buxton & Hopkins	1927
	---; Jan.-June; 148. ---; bite by day indoors; 220° (Open pools, small pools in clay soil without vegetation, exposed to sun, wheel ruts, borrow pits, slit trenches and bomb craters, overflowed grassy areas and low aquatic vegetation along open stream margin, bites man day and night, in and outdoors)	Boyd	1949
	---; experimental vector of malaria; 148	Ferguson	1926
	---; naturally infected with malaria; 148	Harper et al.	1947
	---; ---; 219	Taylor	1934 a
	In shade or sun, fresh or brackish water, marshes, road edges, coconut groves, cacao plantations; ---; 220	Herivaux et al.	1939
	Sluggish streams with grassy banks, backwaters, small pools, broken bottles, rock holes; bites man by night or in shade by day; 283*	Hetherington	1933
	Road ruts, temporary pools, margins of streams and sloughs, pot holes in drying stream beds, prefers sunlight, coastal plain near the mouths of rivers; March; 283	Belkin et al.	1945
	Small temporary areas of water, hoof marks or cavities, some in large pools, found in sunlight or shade, large and shallow rain water pool containing dead coconut leaves just above the beach; in houses; 283	Paine & Edwards	1929

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES punctulatus</i> Dönnitz (cont.)	---; naturally infected with <i>Plasmodium</i> , found to harbor filarial worms; 283 (Road ruts, temporary pools, exposed margins of streams and sloughs, pot holes in drying stream beds, pools free from vegetation and flotage, prefer sunlight, bites man, active during early hours of day and in dwellings, involved in the transmission of periodic filariasis, naturally infected with malaria)	Belkin	1962
	---; naturally infected with filaria; 283	Schlosser	1949
	---; bites man freely in captivity; 289°	Oman & Christenson	1947
<i>punctulatus farauti</i> Laveran	Brackish water; naturally infected with malaria, enters houses, prefers shade, most active at night, Jan.-April; 32. ---; ---; 50*. Sago palm swamps, pools; hospital, May-Oct.; 148*	Roberts & O'Sullivan	1948
	---; common, bites in captivity, experimentally infected with <i>Plasmodium vivax</i> , <i>P. falciparum</i> and <i>P. malariae</i> ; 32*°	Mackerras & Roberts	1947
	---; carrier of malaria; 32, 283	Roy & Brown	1954
	---; ---; 50*, 121*, 283*. ---; naturally infected with <i>Wuchereria bancrofti</i> ; 220	Manson-Bahr	1959
	---; ---; 50, 148, 283 (Exposed, sunny water collections with or without vegetation, nocturnal, bites man readily, enters houses)	Steffan	1966
	Exposed waters, natural grassy pools, foxholes; in houses, Apr.; 148	King & Hoogstraal	1946 a
	Permanent water, artificial containers; intermediate host of tertian and quartan malaria; 220	Lever	1945
	---; naturally infected with <i>W. bancrofti</i> ; 283	Schlosser	1949
<i>punctulatus molluccensis</i> Swellengrebel & Swellengrebel de Graaf	Common in low-lying coastal and inland areas, margins of shallow, open, vegetated swamps, brackish shaded water, sunlit muddy wheel ruts, hoofmarks; enters houses after dark to bite man, naturally and experimentally infected with malaria; 32*°. ---; ---; 50*. Brackish, partly shaded water with algal growth and vegetation, pools on sago swamps, jungle margins, at back-waters of creek; enters houses, naturally and experimentally infected with malaria, bites night, Nov., Dec., Jan.; 148°. ---; ---; 220*, 283*	Lee & Woodhill	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANOPHELES punctulatus</i> <i>mollucensis</i> Swellengrebel & Swellengrebel de Graaf (cont.)	Lagoons and potholes along river banks; common; 32. ---; feed by day if sky is overcast, feeds freely indoors from mid-afternoon until late at night; 50°. ---; 148 (Sunlit artificial and natural waters, banks of rivers and creeks, with and without vegetation, drains, trenches, swamps, hoofprints, puddle holes and sometimes brackish water pools, follows man, enter houses, important intermediary host of malaria, efficient intermediary host of <i>Wuchereria bancrofti</i>)	Taylor	1943 a
	Water bodies exposed to sunlight among vegetation, floating leaves and algae, pig wallow, wheel ruts, swamps, coral pit, stream back waters, seepage pool, wells, treeholes and artificial containers; bites man in and near houses from 6:30 p.m. onward; 50°	Laird	1946
	Wells of villages, open swamps, backwaters of rivers and creeks; Nov.; 50	Taylor	1934
	In open sunlight, pools, puddles, brooks, drainage ditches, ponds, fresh and brackish river banks, hoof prints, artificial containers; in houses; 148	Farner	1943
	Any collection of water open to the sun, and large rivers; ---; 148**	Wilcocks	1944
	Clear streams and sago swamps, green slimy ponds, muddy pig wallows or puddles, drains, buffalo wallow; ---; 148	Holland	1933
	---; experimentally infected and experimental vector of <i>W. bancrofti</i> ; 148, 203. ---; naturally infected with <i>W. bancrofti</i> ; 283*	Raghavan	1961
	---; common; 203	Farner	1944 a
	---; ---; 203, 220 (Active any time of the day, enter houses and bites man, malaria vector)	Covell	1944
	---; ---; 219	Taylor	1934 a
	---; ---; 263	Buxton & Hopkins	1927
	---; ---; 268	Smart	1943
<i>punctulatus</i> <i>novaeguineensis</i> (Venhuis)	---; ---; 148	Knight et al.	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>Anopheles punctulatus</i> <i>punctulatus</i> D8nitz	---; ---; 32*	Geigy & Herbig	1955
	---; ---; 32, 148 (Small pools, open, sunlit rain pools, margins of streams, in houses, bites all night). ---; possible vector of malaria; 220, 283	Russell et al.	1943
	Common in pools with clear water exposed to sunlight, wheel ruts, foot prints in muddy ground, drainage ditches; ---; 50	Laird	1946
	---; ---; 50*. In pools, in wheel tracks; in hospital, May-Oct.; 148*	Roberts & O'Sullivan	1946
	---; naturally infected with <i>Wuchereria bancrofti</i> ; 50, 283. ---; ---; 121*	Manson-Bahr	1959
	Coast and inland up to 3,500 feet elevation, sunlit ground, temporary pools with algal growth, puddles, streambeds, slit trenches, wheel tracks, foot prints; ---; 148	Lee & Woodhill	1944
	Foxholes dug in fields; in houses, Apr.; 148	King & Hoogstraal	1946 a
	---; experimentally infected with <i>Plasmodium vivax</i> , <i>P. falciparum</i> , <i>P. malariae</i> ; 148°	Mackerras & Roberts	1947
	---; naturally infected with <i>W. bancrofti</i> ; 148* (Water exposed to sunlight, hoof prints, gutters, ditches, water tanks, water barrels, beige water in boats, tin cans, coconut shells)	Farner	1943
	---; possible vector of filariasis, common; 148	Avery	1946
	---; ---; 268, 283 (All types stagnant or slow water, prefers open country)	Knight et al.	1944
	---; naturally infected with <i>W. bancrofti</i> , suspected vector of filariasis; 283	Schlosser	1949
<i>scolomoris</i> Belkin, Knight & Rozeboom	Small tributary streams of larger rivers, pot holes in coral stream beds, along margins of streams, shallow taro swamp, deeply shaded areas in flotage of sticks or in leaves along margins of pools; rest in daytime on buttresses and trunks of large trees in swampy jungle areas, Feb., May, July-Sept., Nov., at 1500 feet; 283	Belkin et al.	1945

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>Anopheles stigmaticus</i> Skuse	Small pools with filamentous algae in small creek bed in bush; in brush near waterfall, grass and bushes, Jan. and April; 32	Mackerras	1927
	In clear rock pools; experimentally infected with <i>Plasmodium vivax</i> and <i>P. falciparum</i> ; 32	Mackerras & Roberts	1947
	Cold, clean water in shade, mountainous areas, streambed pools, in pits and rock pools at the edge of creeks; ---; 32	Dobrotworsky	1965
	---; experimentally infected with malaria; 32, 148	Lee & Woodhill	1944
	Ditches with clear, cold water, grassy banks; at an altitude of 1860 meters; 148	Bonne-Wepster & Swellengrebel	1953
<i>stigmaticus corethroides</i> Theobald	---; ---; 32	Taylor	1934 a
<i>stigmaticus stigmaticus</i> Skuse	Small pools containing filamentous algae in gullies and small creekbeds at 6,000 feet elevation; ---; 32. ---; ---; 148	Russell et al.	1943
	Small water holes or streams; ---; 32	Knight et al.	1944
	---; ---; 32*	Geigy & Herbig	1955
<i>subpictus</i> Grassi	---; ---; 50. ---; in houses; 148° (Fresh to salty, dirty and polluted water, excavations, hollows, borrow pits, buffalo willows, ricefields, drains, pools, furrows, water tanks, enters houses, experimental infection of <i>Plasmodium falciparum</i> and <i>P. vivax</i>)	Bonne-Wepster & Swellengrebel	1953
	Along coast in open or partly shaded semi-tidal pools, grassy fresh-water pools, beached canoe; ---; 148	Boyd	1949
	---; naturally infected with malaria; 148°	Russell et al.	1943
	---; ---; 148 (Muddy pools, rain pools and pools contaminated with sewage, intermediary host of malaria)	Taylor	1938
	---; ---; 148 (Dirty or brackish water, large or small water collections, especially near habitations)	Knight et al.	1944
	---; ---; 148*	Kum	1929

TABLE 1 - MOSQUITOES (continued)

SPECIES	DREEDING HABITATS; ADULT ACTIVITY, DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANCYPHELES</i> <i>subpictus</i> <i>indefinitus</i> (Ludlow)	Road ruts, semi-stagnant pools or marshes along stream and rock holes, unshaded and brackish water, drain ditches, artificial containers; Mar.-Nov.; 197°	Bohart	1957
	Lowland fresh water marshes, stagnant and slowly moving streams, buffalo wallows, coral rock holes, ground pools, brackish water in coastal tide-waters; ---, 197	Yamaguti & La Casse	1950
<i>tessellatus</i> Theobald	---; ---; 148 (Ricefield and vegetated spring pools, stream edges, enters houses, naturally infected with malaria, bites man)	Simmons & Aitken	1942
<i>ambrosus</i> Theobald	---; ---; 148	Hill	1925
<i>vagus</i> Dönnitz	---; ---; 148 (Almost anywhere but generally avoiding salt water, enter houses, rest on stream banks)	Steffan	1966
	---; ---; 148 (Small pools and puddles)	Covell	1944
<i>vanus</i> Walker	---; ---; 148 (Anthropophilic)	Steffan	1966
<i>varuna</i> Iyengar	---; ---; 32*	Geigy & Herbig	1955
<i>ARMIGERES</i> <i>brevinli</i> (Taylor)	Water of high organic content in coconut husks, rotting tree stumps, artificial containers; bites by day in shady jungle, rarely in open on sunny days, active on dull days, enters houses; 50°	Laird	1946
	---; ---; 50, 148, 268, 283° (Coconut husks and shells with decaying coconut meat, strongly attracted to man, bites by day, around native villages and forest areas)	Belkin	1962
	Tree hole; bite in jungle; 148°	Hill	1925
	Coconut shell, artificial container; ---; 148	Brug	1934
	---; ---; 148, 283 (Hollow log, pool near village, coconut shell, beached canoe)	Knight et al.	1944
	Semi-mangrove scrub along the coast; vicious bite during day; 283°	Perry	1949
<i>denbesteni</i> Brug	---; ---; 148 (Ditches)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ARMIGERES</i> <i>lacuum</i> Edwards	Water of high organic content in coconut shells, rotting tree stumps, and artificial containers; rarely in open on sunny days, active on dull days; 50° ---; ---; 50, 148 (Bamboo, tree holes, bite by day in jungle, at night in houses) ---; ---; 50, 148 (Putrid water in tree holes and coconuts)	Laird Hill Steffan	1946 1925 1966
<i>malayi</i> (Theobald)	---; at 1800 meters elevation; 148 ---; ---; 148 (Tree holes, bamboo stumps, coconut shells and axils of fallen <i>Areca</i> palm leaves)	Bonne-Wepster Delfinado	1948 1966
<i>malayi</i> var. <i>breinli</i> Taylor	Coconut husks; ---; 283 ---; ---; 148, 283 Coconut husk, common in semi-mangrove swamp scrub; bites fiercely by day but less frequently in plantations; 283°	Paine & Edwards Taylor	1929 1934 a
<i>milnensis</i> Lee	Putrid water in tree holes, septic tanks and drains; rest outdoors, bites man during day-time; 148° ---; ---; 148	Steffan Penn	1966 1947
<i>obturbans</i> (Walker)	---; ---; 32 (Anthropophilic, bites at sundown, sometimes in houses) Coconut husk; ---; 148 ---; July; 148 ---; ---; 148 (Dirty water in artificial containers in sun or shade, tree holes, bamboo)	Brug Lee Bonne-Wepster Knight et al.	1931 1944 1948 1944
<i>papuensis</i> Peters	Foul water in sago palms, banana stumps, drains, septic tank, small collections of surface water; ---; 148	Steffan	1966
<i>BANKSINELLA</i> <i>lineatopennis</i> Ludlow	---; in bathroom at 10:00 a.m., Jan., Feb., March and May; 32° ---; ---; 32	Hill Taylor	1922 1917
<i>BIRONELLA</i> <i>bironelli</i> (Christophers)	---; ---; 32 ---; ---; 5, 148 (Well shaded jungle pools, along grassy edges "slow running streams, bites man occasionally")	Stone et al. Steffan	1959 1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>BIRONELLA</i> <i>brugii</i> Soesilo & Van Slooten	---; ---; 50 ---; ---; 148	Steffan Boyd	1966 1949
<i>confusa</i> Bonne-Wepster	---; ---; 148	Steffan	1966
<i>derrooki</i> Soesilo & Van Slooten	---; ---; 148	Lee & Woodhill	1944
<i>gracilis</i> Theobald	Common in shady stagnant water; ---; 32 ---; ---; 32°, 148° (Sago and other swamps, shaded ground pools containing decaying vegetation) Mountain stream with decaying leaves, still water with floating debris and emergent vegetation in <i>Pandanus</i> ssp.; ---; 50 Rain water and overflow pools in the forest; ---; 148	Lee & Woodhill Boyd Laird Russell et al.	1944 1949 1946 1943
<i>hollandi</i> Taylor	Shady jungle streams; ---; 50 Well; ---; 50 ---; ---; 50, 148 (Undisturbed semi- and permanent waters, artificial containers, in deep shade, tolerates water with high organic contents, most frequently in cool clear water) ---; ---; 50, 148 (Shady streams, swamps and pools in sago swamps, pot holes of creeks)	Lee & Woodhill Taylor Belkin Steffan	1944 1934 1962 1966
	Undisturbed, natural, permanent or semi-permanent bodies of water, streams, swamps, dense coastal lagoons at the mouths of rivers, bomb craters, "fox holes", road, hog wallows, artificial containers, in shade, pools in beds of dry streams, frequent in cool, clear water in vegetation or flotage; all year; 283	Belkin et al.	1945
<i>occulta</i> Bonne-Wepster	---; ---; 148	Bonne-Wepster & Swellen- grebel	1953
<i>papuae</i> (Swellengrebel & Swellengrebel- de Graaf)	---; ---; 50, 148 (Slow running streams, edges of well-shaded, fast streams, exposed or shaded jungle pools, sites man)	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>BIRONELLA</i> <i>papuae</i> (Swellengrebel & Swellengrebel de Graaf) (cont.)	Quick running forest streams, large river banks, sunny or shady pools, slowly running streams; ---; 148°	Bonne-Wepster & Swellen- grebel	1953
<i>papuae</i> <i>brugii</i> Soesilo & Van Slooten	Swiftly flowing streams with vegetation; ---; 148	Lee & Woodhill	1944
<i>papuae</i> <i>papuae</i> Swellengrebel	---; ---; 50, 148	Knight et al.	1944
<i>soesiloi</i> Strickland & Choudhury	---; ---; 50. Marginal vegetation along small streams and isolated pools in streambeds; ---; 148	Boyd	1949
	Quickly running forest streams, large river banks, sunny or shaded pools, slow streams; ---; 148	Bonne-Wepster & Swellen- grebel	1953
	Swampy creek; ---; 148	Lee & Woodhill	1944
<i>travestita</i> (Brug)	---; ---; 50, 148 (Partially shaded swamps, pools in sago swamps, shaded pot holes of creeks)	Steffan	1966
	Partially shaded swamps, sago swamps, pools; ---; 148	Lee & Woodhill	1944
<i>walchi</i> Soesilo	---; ---; 148	Bonne-Wepster & Swellen- grebel	1953
<i>CAENOCEPHALUS</i> <i>concolor</i> Taylor	Salt water pools in rocks; Nov.; 32	Taylor	1913
<i>CALOMYIA</i> <i>priestleyi</i> Taylor	---; March; 32	Taylor	1913
<i>CHAETOCRUIMYIA</i> <i>sylvestris</i> Theobald	---; scrub covered ravine on mountain side; 32	Hill	1922
<i>CIRYSOCONOPS</i> <i>acer</i> Walker	---; in dense scrub near fresh water, in dwellings at night; 32°	Hill	1917
<i>aurites</i> Theobald	---; dense tropical growth near river; 32	Hill	1917

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CHRYSOCONOPS brevicellulus</i> Theobald	---; ---; 148	Taylor	1914
<i>littleri</i> Taylor	---; ---; 32	Taylor	1913
<i>COQUILLETTIDIA crassipes</i> (van der Wulp)	---; ---; 32, 50, 220, 283 (Associated with <i>Ipomoea aquatica</i> and grass roots in dirty pit, enters houses, bites man)	Steffan	1966
<i>giblini</i> (Taylor)	---; ---; 32, 50, 148	Steffan	1966
<i>lutea</i> Belkin	Plant roots in swamp, fresh water lagoon; wooded areas around swamps; 283	Steffan	1966
<i>memorans</i> (Bonne-Wepster)	---; ---; 148	Steffan	1966
<i>nigrochracea</i> (Bonne-Wepster)	---; ---; 148	Steffan	1966
<i>ochracea</i> (Theobald)	---; ---; 148	Steffan	1966
<i>xanthogaster</i> (Edwards)	---, ---; 32, 148, 220 (Small, weed covered swamps)	Steffan	1966
<i>CULEX abdominalis</i> Taylor	---; ---; 32	Taylor	1917
<i>albinervis</i> Edwards	Mats and clumps of filamentous green algae in taro swamps, at edge of streams and ditches; ---; 107	Belkin	1962
	Ditch with stagnant water pools; ---; 107	Edwards	1929
	Ponds; ---; 107	Lever	1944
	Dale swamp; ---; 107	Paine	1943
<i>alis</i> Theobald	Swamp, beached canoe; ---; 148, 179	Knight et al.	1944
<i>annulirostris</i> Skuse	Fresh and brackish ground pools, swamps, ditches and channels; potential vector of encephalitis, active after sunset, common in late summer and autumn; 32	Dobrotworsky	1965
	Any small collection of clear water; sandstone gullies; 32	Mackerras	1928

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX annulirostris</i> Skuse (cont.)	Tea-tree swamp; bites by day; 32°	Bearup & Laurence	1947
	Fresh waters, weedy margins of marshes and ponds overgrown with vegetation and green algae; ---; 32	Cooling	1924 b
	---; naturally infected with <i>Wuchereria bancrofti</i> ; 32*. ---; ---; 66*, 148*	Manson-Bahr	1959
	---; May; 32	Minter	1950
	---; ---; 32*	Taylor	1938
	---; ---; 32, 50, 83, 97, 107, 114, 121, 148, 183, 219, 220, 263, 268, 281, 283, 314, 315 (Permanent or temporary, standing or flowing, fresh or strongly brackish, clean or with very high organic content waters, canoes, artificial containers, in open sunlit sites, also strongly shaded pools and dense jungle swamps, rarely in coconut husks or large open treeholes, bites man readily from late afternoon through the night, indoors and in the open)	Belkin	1962
	Clear water in road rut, artificial container; enters houses in evenings; 50	Laird	1946
	Ground pools, artificial containers; Nov., persistent and annoying in the early evening; 66°. Cavity in felled log, hot springs and a brackish land-locked lagoon; ---; 220. Coconut shell; ---; 263	Bohart & Ingram	1946
	---; experimentally transmits Japanese "B" encephalitis; 66	Hammon et al.	1949
	Brackish ditches; ---; 97°. Open sheets of water; ---; 107. Clear water with filamentous green algae, water in hoofmarks, stagnant pools, slowly running ditches among taro, open concrete drain; all year; 263	Buxton & Hopkins	1927
	Brackish seepage water wells; ---; 97	Venner	1944
	Fresh water well; bites at night; 107°	Paine	1943
	Swamps, ricefields, ponds, rock pools, artificial containers; ---; 107	Lever	1944 a
	Drains, weedy streams; ---; 107	Lever	1943 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX annulirostris</i> Skuse (cont.)	---; naturally and experimentally infected, natural and experimental vector of <i>Wuchereria bancrofti</i> ; 148*. ---; naturally infected with non-periodic <i>W. bancrofti</i> ; 281 Fields; ---; 197 Fresh or stagnant water in ponds, road ruts, artificial containers; ---; 219* Sunny permanent fresh water swamps, road ruts, ditches, ponds, hog wallows, tree bases, occasionally artificial containers, coconut shells; bites man late afternoon; 220° Among open coconut groves and thinned jungle area, natural water catchments; bites by night; 220°, 283° Barrel on waterfront; day and night biter; 222° Ground pools, artificial containers, depressions, hog wallows with fresh, brackish or foul water; bite in early evening and morning; 283° Large and shallow rain pool containing dead coconut leaves just above the beach, small salt water pools in rocks above high tide marks; ---; 283	Raghavan Travis Perry Perry Oman & Christenson Graham Perry Paine & Edwards	1961 1947 1950 1946 1947 1939 1949 1929
<i>annulirostris</i> <i>annulirostris</i> Skuse	---; at light, all year; 66. Road rut; July; 236 (Common in fresh water in ground pools and artificial containers, nuisance in evening and at night, potential vector of Japanese "B" encephalitis and probable vector of filariasis)	Bohart	1957
<i>annulirostris</i> <i>marianae</i> Bohart & Ingram	Fresh or slightly brackish water of ground pools, marshy lake edges, concrete cisterns, road ruts, rock pools, stream pools, marshy pools, artificial containers; all year; 197	Bohart	1957
<i>atracus</i> Collless	---; ---; 50	Steffan	1966
<i>atriiceps</i> Edwards	Tree holes, coconut husks, artificial containers; larvae of <i>Wuchereria bancrofti</i> may occasionally complete development, in houses, tree buttresses, bites man at night; 281° ---; experimentally infected with non-periodic <i>W. bancrofti</i> ; 281	Belkin Raghavan	1962 1961

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX</i> <i>australicus</i> Dobrotworsky & Drummond	---; ---; 32 219	Belkin	1962
<i>basicinctus</i> Edwards	Ground pools with <i>Spirogyra</i> ; ---; 32 ---; enters houses; 32 ---; ---; 32, 220 (Rock pools) Algae mats in fresh water streams and rivers; ---; 219 Algae along river margins; rare species; 220	Lee Edwards Knight et al. Perry Perry	1944 1922 a 1944 1950 1946
<i>becki</i> Belkin	Crabholes; ---; 283	Belkin	1962
<i>belkini</i> Stone & Penn	Leaf axils of <i>Pandanus</i> ; ---; 283	Belkin	1962
<i>bergi</i> Belkin	Rock pools and pools in blocked stream beds; ---; 283	Belkin	1962
<i>bicki</i> Stone & Penn	Leaf axils of sago palm; ---; 148	Stone & Penn	1947
<i>binigrolineatus</i> Knight & Rozeboom	Leaf axils of sago palms in sago swamp; in forest, Jan.-March; 148	Knight & Rozeboom	1945
<i>bitaeniorhynchus</i> Giles	Shallow swamp; at lamp indoors, March, April and June; 32 Clean, stagnant and slow-flowing water with vegetation, swamps; ---; 32 ---; ---; 32, 148. In clumps of <i>Spirogyra</i> in ponded ditches with clear water; ---; 219 (In mats of green algae also shaded sites, suspected vector of encephalitis and naturally infected with larvae of <i>Wuchereria malayi</i> , attack man readily, particularly at night) ---; ---; 32 (Hill streams, pools, ditches with filamentous green algae, bite during the day, rarely at night) ---; ---; 32, 148 (Open weedy pools, ricefields) ---; ---; 148*	Hill Lee Belkin Hsiao Bohart Manson- Bahr	1922 1944 1962 1945 1945 1959

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX</i> <i>bitaeniorhynchus</i> Giles (cont.)	---; ---; 148, 219, 236 (Bites man at night) Rice paddies, ponds, slow streams with green algae; enters houses at night, possibly carries Japanese "B" encephalitis, Dec.; 236°	Delfinado Bohart	1966 1957
<i>brevipalpis</i> (Giles)	---; ---; 50, 148 (Tree holes, cut bamboo, water tanks and in forest streams) Tree holes, bamboos; domestic; 148	Delfinado Lee	1966 1944
<i>buxtoni</i> Edwards	Shaded areas in permanent swamps among tree roots, shaded grassy stream margins, occasionally in rocky pools and abandoned road ruts; ---; 220	Belkin	1962
<i>caeruleus</i> King & Hoogstraal	Pools in flat swampy forest; ---; 148	Steffan	1966
<i>cairnsensis</i> (Taylor)	---; ---; 32	Stone et al.	1959
<i>carolinensis</i> Bohart & Ingram	Tree holes, coconut shells and husks, taro leaf axils, polluted water in artificial containers; Nov. and Dec.; 66 ---; July; 66	Bohart & Ingram Bohart	1946 1957
<i>cataractarum</i> Edwards	On rocks under waterfalls; ---; 50	Edwards	1923
	---; ---; 148	Steffan	1966
<i>chaetoventralis</i> (Theobald)	---; ---; 32	Edwards	1924
<i>cheesmanae</i> Mattingly & Marks	---; ---; 183, 219 (Rock pools in streambeds)	Belkin	1962
<i>christiani</i> Colless	Shallow pools with emergent vegetation; ---; 148	Steffan	1966
<i>ciliaris</i> (Linnaeus)	---; ---; 32*	Manson- Bahr	1959
<i>concolor</i> Desvoidy	Shallow dirty swamps, dirty wells, liquid manure pits, contaminated seepages, neglected drinking troughs; rarely indoors, Jan., Feb., March and June; 32	Hill	1922
<i>crassistylus</i> Brug	---; ---; 148	Lee	1944
<i>crinitulus</i> Edwards	Brackish water; ---; 32	Knight et al.	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX cylindricus</i> Theobald	Fresh water pools in creeks and swamps; ---; 32 ---; ravines on mountain side; 32 ---; ---; 32, 50 (Shallow ground pools) Wheel ruts, grassy ditches, swamps, wells; ---; 50	Lee Hill Steffan Laird	1944 1922 1966 1946
<i>digcelensis</i> Brug	---; ---; 32 ---; Jan.; 148	Lee Steffan	1944 1966
<i>douglasi</i> Dobrotworsky	Rocky valleys, in shallow, cool, clean shaded backwaters, pools with sandy bottom, abundant under overhanging stones; dark recesses in stream banks and in rocks, rarely bites man, Apr.-May; 32°	Dobrotworsky	1965
<i>dumbletoni</i> Belkin	Rock pools and holes; ---; 219	Belkin	1962
<i>fatigans</i> Wiedemann	Domestic collections of water, prefers polluted water and liquid manure; in or near houses, bites only in the dark; 32* Fouled, sheltered drains, cesspools; most troublesome species, all year; 32 Irrigation channels and street watertables; ---; 32 Fresh waters; ---; 32 ---; probable vector of filariasis; 32. ---; ---; 219 ---; May; 32 ---; ---; 32, 148, 283 (Potholes chiefly in mangrove tidal area) Beached canoes with rain water; Aug.-Sept.; 50 Taro swamps and pools in shade; ---; 83 ---; ---; 97, 114, 121, 179 (Foul water, cesspits and artificial containers near human habitation, vector of filariasis) Stagnant rock pools, ground pools, coconut husks; enters houses, bites by night, common in Mar.-June; 107* Drains in soapstone, pools of dirty water, polluted water; January; 107	Mackerras Hill Taylor Ferguson Ferguson Minter Barraud Laird McKenzie Smart Paine Lever	1928 1917 1918 1926 a 1926 1950 1934 1946 1925 1943 1943 1943 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX</i> <i>fatigans</i> Wiedemann (cont.)	Pit privies, organic matter in artificial containers; ---; 107 ---; naturally and experimentally infected with non-periodic <i>Wuchereria bancrofti</i> ; 107, 281. ---; naturally and experimentally infected with non-periodic <i>W. bancrofti</i> ; 263 ---; Feb., March, common; 114. Tin cans, coconut shells and husks, barrels of rain water, tree holes, Hopkins muddy pig wallow, cesspits, small hole in block of lava, in open drain very frequently; ---; 263 ---; naturally infected with <i>W. bancrofti</i> ; 148, 220, 283 ---; ---; 148* ---; in house, March; 199 ---; ---; 199** Any place exposed to full sunlight and holding water charged with decaying organic matter; bite at night, all year; 222° Near dwellings, field or bush, water troughs, tree stumps, hollow places in logs, broken coconut shells; bites man at night, naturally infected with <i>Wuchereria bancrofti</i> ; 263*** ---; Jan.-Feb.; 263 Polluted and dirty water; rest in houses, bites by night; 281° Barrel containing dirty water; ---; 283	Lever Raghavan Buxton & Manson- Bahr Wilcocks Edwards Mumford & Adamson Graham Doane Edwards Galliard et al. Paine & Edwards Belkin Knight et al. Perry Dobrotworsky Lee	1944a 1961 1927 1959 1944 1935 1934 1939 1914 1928 1949 1929 1962 1944 1946 1965 1944
<i>femininus</i> Edwards	Rock pools along streams, sometimes ground pools, shallow brackish wells and tree root holes; ---; 220 Root pocket with dead leaves, pool in streambed; ---; 220 Road ruts, open wells, artificial containers, occasionally tree holes; ---; 220		
<i>fergusoni</i> (Taylor)	Clean water pools and swamps in hill forest, in back-water pools shaded by trees and overgrown hanging rocks in rocky valleys; ---; 32 Fresh water ground pools and rock pools often with <i>Spirogyra</i> ; ---; 32		

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX</i> <i>flavifrons</i> Skuse	---; ---; 32	Cooling	1924a
<i>fragilis</i> Ludlow	---; ---; 50, 148. Artificial containers, coconut shells; ---; 283 (Tree holes, sago and papaya stumps and ground pools with foul water containing much organic matter)	Belkin	1962
	---; ---; 50, 148 (Artificial containers and coconut shells)	Delfinado	1966
	---; ---; 148, 283 (Semi-permanent or temporary ground pools with algae, Jan.-June)	Steffan	1966
<i>franclemonti</i> Belkin	Dense jungle swamps, swamp pool, stream margins; ---; 283	Steffan	1966
<i>fraudatrix</i> (Theobald)	---; ---; 32°	Hill	1922
	---; ---; 32, 50, 148 (Pot holes in mangrove tidal area, also away from coast, shallow wells)	Lee	1944
	---; ---; 32, 50, 148 (Shaded temporary ground pools)	Steffan	1966
	Wheel ruts, grassy swamps, tree holes; occasionally bite in day near breeding places; 50°	Laird	1946
	Shaded swamps among tree roots, grassy stream margins, occasionally rocky pools, road ruts; ---; 220	Perry	1946
	Shallow fresh water pot holes; ---; 283	Perry	1949
<i>fraudatrix</i> var. <i>annulata</i> Taylor	---; ---; 32	Taylor	1934a
<i>fraudatrix</i> <i>fraudatrix</i> Theobald	---; ---; 32, 50, 148, 220, 283 (Shaded leafy pools, sunlit footprint, brackish mangrove or fresh water potholes)	Knight et al.	1944
<i>fraudatrix</i> var. <i>solomonis</i> Edwards	Tree hole; ---; 283	Paine & Edwards	1929
<i>fusca</i> sp. Wiedemann	---; July-Aug.; 66°. Artificial container containing taro plant; Aug., Dec.; 236° (Natural pools, shallow wells, domestic collections of water, seldom bites man)	Bohart	1957

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX fuscicinctus</i> King & Hoogstraal	---; April; 148	Steffan.	1966
<i>gaufini</i> Belkin	Stagnant swamp, potholes along a stream and shaded leafy, grassy pools; ---; 219	Belkin	1962
<i>gelidus</i> Theobald	Ground, weedy pools, marshy tracks; ---; 148 ---; ---; 148 (Enter houses)	Lee	1944
<i>globocoxitus</i> Dobrotworsky	---; ---; 32	Stone et al.	1959
<i>gossi</i> Bohart	---; July, Aug., Oct., Dec.; 66	Bohart	1957
<i>halifaxii</i> Theobald	Street gulley traps, disused ships' tanks, garden water barrels, and other water-holding rubbish about habitations and rarely in fresh tea-tree swamp; ---; 32 ---; ---; 32, 50, 148, 283 (Permanent or temporary ground pools, frequently in all types of artificial containers, rock pools, stream margins and tree holes, coconut shells or husks, predaceous and strongly cannibalistic, may be of minor benefit in reducing the economically important species)	Barraud	1934
	---; ---; 32, 50, 148, 283 (Ricefields, small ponds, roadside ditches, jungle pools and other artificial containers about habitation)	Beikin	1962
	---; ---; 32, 148, 283 (Swamps, wheel ruts, slit trenches)	Delfinado	1966
	---; ---; 32, 148, 283 (Contaminated wells)	Lee	1944
	Clear water in grassy wheel ruts water tank, pools, predaceous; rare; 50	Knight et al.	1944
	Bog pools; Apr.; 148	Laird	1946
	Artificial containers and rock pools in coral cliffs; ---; 283	King & Hoogstraal	1946a
<i>hilli</i> Edwards	---; ---; 32	Perry	1949
	Muddy ditch with some algal scum, hoofmarks; ---; 283	Edwards	1922a
		Paine & Edwards	1929

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX</i> <i>hili</i> var. <i>buxtoni</i> Edwards	Dark swamp under bamboos, stinking water full of leaves, footprints beside a ditch in full sun-shine; ---; 220 ---; ---; 283	Buxton & Hopkins	1927
<i>hurlbuti</i> Belkin	Leaf axils of <i>Pandanus</i> , densely shaded nipa swamp; ---; 283	Steffan	1966
<i>iponjari</i> Mattingly & Rageau	---; ---; 183, 219 (Rock pool in coral, ground seepage pools, deep well, barrels and hole in coconut trunk)	Belkin	1962
<i>japoni</i> Theobald	Swamps and tidal creeks; in long grass, scrub, night and day biter; 32° ---; ---; 32, 50, 107, 148, 220, 263 (Small coastal water collections, brackish or fresh) ---; ---; 97 ---; ---; 107° ---; experimental vector of Japanese "B" encephalitis; 197	Hilli Knight et al. Ferguson Veitch & Greenwood Hammon et al.	1922 1944 1926 1921 1949
<i>kesseli</i> Belkin	Coral or sand pockets along beaches, ditches and artificial containers; ---; 220 Brackish water; ---; 220	Perry Daggy	1946 1945
<i>kuhni</i> King & Hoogstraal	Tree holes, fallen palm bracts; Feb.-March, Dec.; 148	Steffan	1966
<i>kusciniensis</i> Bohart	Water collected on cave floors to depths of several feet, water with decayed matter, ground pools; Feb., Mar.; 66	Bohart	1957
<i>lafuonii</i> Belkin	Rock crevices along jungle stream; ---; 283	Belkin	1962
<i>latifus</i> Belkin	Jungle swamps, along a stream, in treehole; ---; 283	Belkin	1962
<i>latis</i> Pobrctworsky	---; ---; 32	Stone et al.	1959
<i>leesi</i> King & Hoogstraal	Pond, large log hole; Feb., May; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX</i>			
<i>leonardi</i> Belkin	Jungle swamps with dense vegetation; ---; 283	Belkin	1962
<i>litoralis</i> Bohart	---; ---; 148, 263, 281	Stone et al.	1959
	Fresh to saline water in coral brackish rock pools, pot holes, artificial containers along coast; common, March, June, Aug.-Oct.; 197	Bohart	1957
	Tree holes; ---; 197	Yamaguti & La Casse	1950
<i>malayi</i> (Leicester)	Stagnant pools with much vegetation; ---; 148	Lee	1944
	---; ---; 148 (Small rock pools along mountain streams)	Steffan	1966
<i>maplei</i> Knight & Hurlbut	Taro axils, cement tanks, artificial containers around habitations; Jan.-Mar., June-Sept.; 66	Bohart	1957
<i>markeae</i> King & Hoogstraal	---; April; 148	Steffan	1966
<i>marquesensis</i> Stone & Rosen	Rock holes, coconut husks, water drums and barrel tops; ---; 199	Belkin	1962
<i>millironi</i> Belkin	Rock pools and rock holes in a ponded creek; ---; 219	Belkin	1962
<i>mimulus</i> Edwards	Streams and pools with vegetation, tree holes, fallen bamboos with collections of water, stone tanks, sunny streams; ---; 32	Lee	1944
	---; ---; 32, 148 (Empty snail shells and truck rut)	Delfinado	1966
	---; ---; 148 (Ground pools)	Knight et al.	1944
<i>miraculosus</i> Bonne-Wepster	---; ---; 148	Lee	1944
<i>messmani</i> Taylor	---; ---; 32	Taylor	1915
<i>muticus</i> Edwards	---; ---; 50, 283 (Contaminated well near beach)	Hill	1925
	Forest pools, treeholes; ---; 148	Brug	1934

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX</i>			
<i>nelsoni</i> King & Hoogstraal	Crab hole in rain forest; ---; 148	Steffan	1966
<i>nigropunctatus</i> Edwards	---; July-Aug., Nov.-Dec.; 66. Artificial containers; Jan.-Apr., Aug., Dec.; 236 (Rice-fields, grassy ground pools) ---; ---; 66 (Occasionally in artificial container)	Bohart Delfinado	1957 1966
<i>nocturnus</i> Theobald	---; ---; 107°	Veitch & Greenwood	1921
<i>normanensis</i> Taylor	---; ---; 32	Taylor	1915
<i>occidentalis</i> Skuse	---; April; 32	Hill	1917
<i>omani</i> Belkin	Dense jungle swamps; on vegetation near jungle swamp; 283	Belkin	1962
<i>orbostiensis</i> Dobrotworsky	---; bites by day, Sept.; 32°	Dobrotworsky	1965
<i>ormatus</i> (Theobald)	---; ---; 50, 148 (Deep well shaded hole, partly shaded, muddy leaf-filled seepage pool at edge of sago swamp, hoofprints, bites man, Dec., June)	Steffan	1966
<i>oveni</i> Belkin	Rock holes, pools in rocky stream beds, treehole along mountain stream bed; ---; 283	Belkin	1962
<i>pacificus</i> Edwards	Shallow well, cavity among roots of tree, rot holes and crab holes, water with high organic content; ---; 220 Coconut shells, plant axils; ---; 220 Artificial containers; ---; 220 ---; common; 220	Buxton & Hopkins Belkin Knight et al.	1927 1962 1944 1946
<i>pallidiceps</i> (Theobald)	---; ---; 148, 283	Stone et al.	1959
<i>pallidiothorax</i> Theobald	Forest pools, treeholes, during rainy season and wells in dry season; ---; 148 ---; ---; 148 (Bamboo, stream, rock pools, ground pools and artificial containers)	Lee Delfinado	1944 1966
<i>palpalis</i> Taylor	---; ---; 32	Hill	1917

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX papuensis</i> (Taylor)	Clear water with vegetation, in wheel rut and truck tire; ---; 50	Laird	1946
	---; ---; 50, 148, 283 (Tree holes, artificial containers and ground pools, putrid water in hollowed sago trunks, shaded or semi-shaded places where the water is clear or with leaves)	Delfinado	1966
	---; ---; 148, 283 (Coconut shells, refuse pits)	Lee	1944
	Coconut husks; ---; 283	Paine & Edwards	1929
<i>parvis</i> Taylor	---; ---; 32	Hill	1917
<i>pedicellus</i> King & Hoogstraal	---; ---; 148	Steffan	1966
<i>perkinsi</i> Stone & Penn	Leaf axils of various Pandanaceae; ---; 283	Belkin	1962
<i>perryi</i> Belkin	Leaf axils of <i>Pandanus</i> ; April; 283	Steffan	1966
	Leaf axils of <i>Pandanus</i> in partial shade in jungle; ---; 283	Belkin	1962
<i>pervigilans</i> Bergroth	---; ---; 32	Edwards	1924
	---; ---; 165	Stone	1963
	In every type of water; nocturnal, in houses, all year; 222°	Graham	1929
	Polluted water, ground pools, artificial containers; ---; 222	Lee	1944
<i>petersi</i> Colless	Shallow pools with emergent vegetation; ---; 148	Steffan	1966
<i>piriens</i> Linnaeus	Pools, water high in organic matter, hoofprints of cows, near ricefields, artificial containers; abundant; 134	van Dine	1904
<i>piriens</i> Jutilyana Wiedemann	Foul water in pools, drains and artificial containers; readily enters houses, bites man at night; 32°	Dobrotworsky	1965
	---; naturally infected with <i>Wuchereria bancroftii</i> ; 32*. ---; ---; 66*	Manson-Bahr	1959
	Ditches, ponds; ---; 134	Pemberton	1943

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX pipiens fatigans</i> Wiedemann (cont.)	---; experimentally infected with <i>Wuchereria bancrofti</i> ; 134	Nelson et al.	1946
<i>pipiens molestus</i> Forskal	Water butts, foul water in pools at rubbish tips, drainage pits and artificial containers; indoors; 32°	Dobrotworsky	1965
<i>postspiraculosus</i> Lee	Open swamps overgrown with reeds; ---; 32	Dobrotworsky	1965
	Brackish swamp; ---; 32	Lee	1944 b
<i>pseudomelanoncia</i> Theobald	Still backwaters of running mountain streams; ---; 32	Lee	1944
	Clear ground pools in forest; ---; 32	Dobrotworsky	1965
	Fresh water, shallow, rocky streams; ---; 219	Perry	1950
<i>pseudomatus</i> Colless	---; ---; 148	Steffan	1966
<i>pullus</i> Theobald	---; ---; 32, 50, 148. Ground pools of all types; ---; 283 (Artificial containers, large treeholes, coconut husks and shells)	Belkin	1962
	---; ---; 32, 50, 148, 283 (Forest and jungle pools, horse trough, canoe, well)	Knight et al.	1944
	---; ---; 32, 50, 148 (Fresh water in wheel ruts, grassy drains)	Lee	1944
	Clear, sunny water of temporary pools; occasionally enters houses by day and early evening; 50	Laird	1946
	Artificial containers; ---; 66. ---; ---; 236 (Treeholes, ground pools, artificial containers)	Bohart & Ingram	1946
	Bog pools; Apr.; 148	King & Hoogstraal	1946 a
<i>quinquefasciatus</i> Say	Sewage-polluted water courses, septic tank, cess-pools, liquid-manure barrels, street gully-traps, water-holding rubbish; in houses, carrier of <i>Wuchereria bancrofti</i> , bites by night, all year; 32°	Cooling	1924
	---; nocturnal and domestic, probable transmitter of filariasis; 32. Fresh foul or brackish water in artificial catchments, stagnant, polluted pools, swamps; ---; 219*. ---; ---; 220*, 263*, 283*	Perry	1950

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX quinquefasciatus</i> Say (cont.)	---; ---; 32* ---; ---; 32, 50, 121, 148 (Artificial containers and other small water collections near habitations, diluted sewage)	Cilento Knight et al.	1924 1944
	Ground pools, rot hole in coconut tree, artificial containers; near human habitations, suspected vector of filariasis; 66. Street gutter, ground pools, air-raid shelters, irrigation water, brackish water wells; near human habitations, common; 134. Ground pools, polluted treehole, artificial containers; probable vector of filariasis; 197°. ---; ---; 236. Pig wallow, coconut stumps exposed to sunlight, open drains, treehole, coconut shells and husks, artificial containers; possible vector of non-periodic filariasis, partial development of <i>Wuchereria bancrofti</i> ; 263 (Ground pools, water grossly polluted by food or sewage, slightly brackish well water, artificial containers, darker corners of habitations, under buildings, caves, air-raid shelters, dark damp situations near living quarters, persistent and annoying biters, mostly at night, important vector of nocturnal filariasis-- <i>Wuchereria bancrofti</i> , possible vector of non-periodic filariasis, suspected vector of Japanese "B" encephalitis)	Bohart & Ingram	1946
	---; experimental vector of Japanese "B" encephalitis; 66	Hammon et al.	1949
	---; common; 66, 197, 200 (Vector of filariasis)	Farner	1944 a
	---; ---; 66°, 197, 236° (Treeholes, bamboos, shallow wells, drains, ditches, latrines, anthropophilic, nocturnal and domestic)	Farner	1944
	---; ---; 83, 95, 97, 114, 183, 199, 219, 220, 222, 263, 268, 281, 283, 314, 315. ---; suspected vector of non-periodic filariasis; 107. ---; suspected vector of periodic filariasis; 217 (Foul ground pools, ditches, large and small artificial containers, dependent on man for breeding places, bite man readily, primarily at night, in and outdoors, important vector of periodic filariasis, naturally and artificially infected with encephalitis)	Belkin	1962
	---; experimentally infected with <i>W. bancrofti</i> ; 134	Nelson et al.	1946

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX quinquefasciatus</i> Say (cont.)	Fields; ---; 197 Stagnant swamps; common and domestic, experimental transmission of dengue; 219 Artificial containers; in houses, rest among vegetation, bites readily at night; 220° ---; carrier of filariasis, experimentally infected with filariasis; 263 ---; naturally infected with non-periodic <i>Wuchereria bancrofti</i> ; 281 ---; ---; 330 (Artificial containers and ground pools, polluted water, severe rests at night, possible vectors of filariasis and encephalitis)	Travis Perry Perry Byrd et al. Raghavan Bohart	1947 1948 1946 1945 1961 1957
<i>roseni</i> Belkin	Brackish pools, also fresh water swamps; in houses; 281 ---; ---; 283	Belkin Stone	1962 1963
<i>punctulatus</i> Peters	Crab holes in partial shade on beach; ---; 148	Steffan	1966
<i>sayi</i> Skuse	---; ---; 32	Taylor	1917
<i>samoensis</i> (Theobald)	---; ---; 148 ---; in a latrine; 263 ---; March-Aug.; 263	Knight et al. Bohart & Ingram Belkin	1944 1946 1962
<i>sitiens</i> Wiedemann	Brackish water in tidal creeks, mangroves near coast, mountain slopes; bites day and night, enters houses at night; 32° Stagnant salt pools and marshes; Feb.-Mar.; 32 Pools, hollow stumps, crabholes, mangrove swamps, fed by springtides or rainwater, weedy lagoons, water holes, artificial containers; ---; 32 ---; ---; 32, 107, 148 (Relatively poor intermediate host of <i>Wuchereria bancrofti</i>) Fresh water pool; ---; 50	Hill Cooling Hill Taylor Laird	1922 1924 1917 1943 a 1946

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX</i> <i>sitiens</i> Wiedemann (cont.)	---; ---; 50, 107, 148, 219, 263, 283. Brackish water in boat on beach; ---; 66. Brackish water of coral rockholes, in boat on beach; ---; 197. Partly brackish elevated coral rockholes containing dead leaves; ---; 220. Brackish swamp, pond in large swamp, artificial containers; ---; 236 (Small coastal collections of brackish sometimes fresh water, coral crevices, boats containing brackish or highly saline water) ---; Feb., July-Dec.; 66°. ---; June, Sept.; 197°	Bohart & Ingram	1946
	---; ---; 97, 114, 219, 220, 263, 283. Undiluted seawater; ---; 107 (Brackish water near seacoast, brackish and fresh water ground pools, coral holes, canoes, artificial containers)	Belkin	1962
	Artificial containers, ditches, stagnant rock pools, wells, coastal seepage pools; enter houses, bite at night; 107°	Paine	1943
	Ditch with stagnant water pools; ---; 107	Edwards	1929
	Fields; ---; 197	Travis	1947
	Brackish water of a mangrove swamp; bites at night, domestic; 219°	Williams	1943
	Mangrove swamps, tidal pools; ---; 219	Perry	1950
	Dark pool under a cliff, seepage; ---; 220	Buxton & Hopkins	1927
	---; ---; 263 (Bites man)	Deifinado	1966
	---; naturally infected with non-periodic <i>Wuchereria bancrofti</i> ; 281	Raghavan	1961
	Coastal coral cliff pockets, brackish and salt water; ---; 283	Perry	1949
	---; in houses; 283	Paine & Edwards	1929
<i>C. fumiferanus</i> Bonne-Wepster & Brug	---; ---; 148	Lee	1944
<i>C. fumiferanus</i> Edwards	All types of ground water, permanent jungle swamps, stream margins and temporary pools, treeholes, artificial containers; tree trunks or other vegetations; 283	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX somerseti</i> Taylor	---; ---; 32	Taylor	1917
<i>squamosus</i> (Taylor)	---; ---; 32, 148. ---; on vegetation; 283 (Dense mats of filamentous green algae in fresh ground water pools and stream margins, more rarely in open swamps with dense vegetation)	Belkin	1962
	---; ---; 32, 148 (Small pools, creek backwaters, semi-permanent puddles)	Lee	1944
	---; ---; 32, 283 (Slow rivulet, brush swamp, canal)	Knight et al.	1944
	Slow moving rivulet, swamp, canal; ---; 148	Brug	1934
	Plantation drains; ---; 283	Hill	1925
<i>starckeae</i> Stone & Knight	---; ---; 32, 219. Along margins of streams and in stream bed pools; ---; 220 (In mats of filamentous green algae in open sunlit ground pools, attempt to bite man)	Belkin	1962
<i>tigripes</i> Grandpré & Charmoy	Waterbutts, stagnant pools, irrigation wells, horse troughs, predaceous and cannibalistic; in long grass, among bushes; 32	Hill	1917
<i>townsvillensis</i> Taylor	---; ---; 32	Taylor	1918
<i>uniformis</i> (Theobald)	---; ---; 148 (Bamboo stumps, treeholes and rock pools in jungle)	Delfinado	1966
	---; ---; 148 (Artificial containers, puddles)	Steffan	1966
<i>ventralis</i> Walker	---; ---; 148	Steffan	1966
<i>vicinus</i> (Taylor)	---; ---; 32, 148	Steffan	1966
<i>vishnui</i> Theobald	In bay, between plants on shore, heath pond; ---; 148	Brug	1931
	Ground pools, ricefields, salt marshes; ---; 148	Knight et al.	1944
	Bog pools; Apr.; 148	King & Hoogstraal	1946a
	---; ---; 148 (Lakes, river backwaters, small streams, drainage ditches, flooded grassland, irrigated ricefields, lagoons, brackish water, bites man by night)	Farner	1943

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULEX walukawi</i> Belkin	Treeholes, coconut shells or husks, rockholes, artificial containers; buttresses of trees; 283	Belkin	1962
<i>skirmorei</i> (Giles)	Submerged grasslands; ---; 148	Lee	1944
	Bog pools; ---; 148	King & Hoogstraal	1946 a
	---; ---; 148 (Ground water, rice paddies, pools and margins of slow moving streams, enter houses, bites man at night)	Delfinado	1966
<i>whittingtoni</i> Belkin	---; ---; 283	Belkin	1962
<i>winkleri</i> Belkin	Rock pools and rock holes; ---; 283	Belkin	1962
<i>CULICOIDES annulatus</i> Taylor	---; April-May; 32	Taylor	1913
<i>annulipes</i> Taylor	---; Oct., Nov.; 32	Taylor	1913
<i>elephantis</i> Taylor	---; Nov.; 32	Taylor	1913
<i>swansonii</i> Taylor	---; Oct.; 32	Taylor	1913
<i>lemonensis</i> Strickland	---; ---; 32	Taylor	1917
<i>hypothrix</i> Taylor	---; ---; 32	Taylor	1917
<i>milleoni</i> (Taylor)	---; ---; 32	Taylor	1915
<i>nigra</i> Taylor	---; ---; 32	Taylor	1913
<i>stejnegeri</i> Taylor	---; April; 32	Taylor	1913
<i>taenioides</i> Strickland	---; ---; 32	Taylor	1917

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULICADA</i>			
<i>vandema</i> Strickland	---; ---; 32	Taylor	1913
<i>wilsoni</i> Taylor	---; among cypress pine; 32	Taylor	1918
<i>CULI ELSA</i>			
<i>annulirostris</i> Skuse	---; ---; 148	Taylor	1914 a
<i>annulirostris</i> var. <i>mili</i> Taylor	---; ---; 148	Taylor	1914 a
<i>fuscus</i> Taylor	---; in waterbutts, March; 32	Taylor	1913
<i>paludis</i> Taylor	---; mangrove swamps, rare; 32	Hill	1917
<i>simplex</i> Taylor	---; enter houses, May; 32	Taylor	1913
<i>vigilans</i> Skuse	Mangrove swamps, tidal creeks, rivers, scrubby ravines, springtidal seawater accumulations, fresh water, hollow of mangrove trunks; diurnal and nocturnal, most troublesome between 8:00 p.m. and 10:00 p.m., in houses, all year; 32° ---; ---; 148	Hill Taylor	1917 1914 a
<i>CULISETA</i>			
<i>antipodea</i> Dobrotworsky	Tea-tree swamps and semi-permanent pools in coast, densely vegetated swamp near river; ---; 32	Dobrotworsky	1965
<i>drummondi</i> (Dobrotworsky)	Pits concealed by undergrowth; bites by day; 32°	Dobrotworsky	1965
<i>frenchii</i> (Theobald)	Subterranean water in the tunnels of land crayfish; common in upland forest with high rainfall, bites by day and most troublesome in forest; 32°	Dobrotworsky	1965
<i>frenchii</i> <i>atritarsalis</i> (Dobrotworsky)	---; ---; 32	Dobrotworsky	1965
<i>hilli</i> (Edwards)	Subterranean waters in the tunnels of land crayfish; bites by day, Oct.; 32°	Dobrotworsky	1965
<i>inconspicua</i> Lee	Shaded ground and rock pools, swamps overgrown by reeds; ---; 32	Dobrotworsky	1965
<i>littleri</i> (Taylor)	Highland forest, shaded permanent pools, under uprooted trees; ---; 32°	Dobrotworsky	1965

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULISETA</i>			
<i>otwayensis</i> (Dobrotworsky)	Shaded pools; ---; 32	Dobrotworsky	1965
<i>sylvanensis</i> (Dobrotworsky)	Pits concealed by undergrowth, fallen branches and other debris; bites by day; 32°	Dobrotworsky	1965
<i>tonnoiri</i> (Edwards)	Backwaters of streams with very slow-flowing or comparatively dead water sheltered by dense canopy of foliage and rich in decaying matter including leaves and debris; ---; 222	Belkin	1962
<i>victoriensis</i> (Dobrotworsky)	Subterranean water in tunnels of land crayfish; bite man in forest, Oct., common in early summer and autumn; 32°	Dobrotworsky	1965
<i>weindorferi</i> (Edwards)	---; ---; 32	Stone et al.	1959
<i>DANIELSA</i>			
<i>albonulata</i> Taylor	---; ---; 32	Hill	1917
<i>minuta</i> Taylor	---; ---; 32	Taylor	1917
<i>DIXOMYIA</i>			
<i>elegans</i> Taylor	---; April; 32	Taylor	1913
<i>ETORIEPTIOMYIA</i>			
<i>elegans</i> Taylor	---; ---; 32	Taylor	1917
<i>FICALBIA</i>			
<i>bougainvillensis</i> Belkin	Puddles in cleared bog, pockets in moss and mud in swamp at mouth of lake, small ground pools, among herbage surrounding pond, puddles, along margins of cane area; ---; 283	Belkin	1962
<i>chamberlaini</i> (Ludlow)	---; ---; 32, 148 (Irrigation ditches with algae and vegetation, along river banks, in fish ponds and water tank)	Delfinado	1966
<i>chamberlaini</i> <i>metallica</i> (Leicester)	---; ---; 32 ---; ---; 148 (Ground pools and ponds with vegetation)	Stone et al.	1959
<i>elegans</i> (Taylor)	---; ---; 32, 50, 148, 283 (Cattle hoofprints with decaying vegetation at edge of swamps, fresh water holes and dams)	Delfinado	1966
	Ground hole; ---; 50, 148	Taylor	1934

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>FICALBIA</i>			
<i>flavens</i> King & Hoogstraal	---; April; 148	Steffan	1966
<i>gurneyi</i> Belkin	Fresh water lagoons, near small aquatic plants, roots of swamp fern; April; 283	Steffan	1966
<i>hybrida</i> (Leicester)	Ground pools with <i>Pistia</i> ; ---; 148	Delfinado	1966
<i>metallica</i> (Leicester)	Grassy swamp, hoof holes, edge of swamp; ---; 32	Lee	1944
<i>minima</i> (Theobald)	---; ---; 148 (Associated with <i>Pistia</i>)	Steffan	1966
<i>modesta</i> King & Hoogstraal	---; Jan., March-April; 148	Steffan	1966
<i>solomonis</i> Belkin	Undisturbed jungle swamps with extremely dense vegetation, shaded edges of swamps; ---; 283	Belkin	1962
<i>FINLAYA</i>			
<i>kochi</i> Dönnitz	Leaf axils; ---; 263°	Doane	1914
<i>poicilia</i> Theobald	---; May, June, Sept. and Nov.; 32° ---; ---; 32 ---; ---; 107° ---; ---; 148	Hill Taylor Veitch & Greenwood Taylor	1922 1918 1921 1914
<i>GRABHAMIA</i>			
<i>flindersi</i> Taylor	---; Nov.; 32	Taylor	1913
<i>theobaldi</i> Taylor	---; ---; 32	Taylor	1916
<i>HARPAGOMYIA</i>			
<i>senostris</i> (Leicester)	Leaf axils; ---; 32, 148	Wharton	1947
<i>leei</i> Wharton	Leaf axils of <i>Colocasia</i> ; ---; 148	Wharton	1947
<i>solomonis</i> Wharton	Leaf axils; ---; 283	Wharton	1947

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>HODGESIA cairnsensis</i> Taylor	---; ---; 32, 283 ---; in dense, shady jungle; 50° ---; ---; 50, 148 (Dense scrub and mangroves)	Steffan Laird Hill	1966 1946 1925
<i>quasisanguinæ</i> Leicester	---; ---; 32, 50, 148 (Vicious biters) ---; at 50 meters elevation; 148	Steffan Bonne-Wepster	1966 1948
<i>solomonis</i> Belkin	Dense jungle swamps, mostly in small pockets of water at edges of swamps; bites extremely painful, bites in open in broad sunlight; 283° ---; ---; 283	Belkin Steffan	1962 1966
<i>spoliata</i> Edwards	Swamps; ---; 148 ---; dense jungles, mangroves on banks of streams, bites by day; 148°	Steffan Hill	1966 1925
<i>triangulata</i> Taylor	---; ---; 32, 148	Taylor	1915
<i>triangulatus</i> Taylor	Permanent spring in dense tropical scrub; Nov.; 32 ---; ---; 148	Hill Taylor	1917 1914
<i>HULECOETEOMYIA milsoni</i> Taylor	---; ---; 32	Taylor	1917
<i>LEPIDOTOMYIA lineatus</i> Taylor	---; ---; 148	Taylor	1914 a
<i>IEUCOMYIA annulirostris</i> Taylor	---; March-April; 32	Taylor	1913
<i>annulata</i> Taylor	---; Feb.; 32 ---; March-April; 32	Hill Taylor	1922 1913
<i>australiensis</i> var. <i>parvaensis</i> Taylor	---; ---; 148	Taylor	1914 a
<i>ricina</i> Taylor	Mangrove fringed swamps, in masses of green, slimy aquatic vegetation; ---; 32	Hill	1917
<i>LOPHOCERATOMYIA annulata</i> Taylor	---; bedroom before sunrise; 32	Hill	1917

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>LOPHOCERATOMYIA</i>			
<i>cirriformis</i> Taylor	---; ---; 32	Taylor	1918
<i>cylindrica</i> Theobald	---; ---; 32	Taylor	1918
<i>LUTZIA</i> <i>halifaxi</i> Theobald	Street gully-traps, disused ships, tanks and other water-holding rubbish about habitation, rarely in tea swamp; ---; 32° Predaceous; in a house; 32 Pools; ---; 32 ---; ---; 148	Cooling Mackerras Taylor Cooling	1924 b 1928 1927 1924 a
	Large and shallow rainwater pools containing dead coconut leaves just above the beach, small salt water pools in rocks above high tide marks; ---; 283	Paine & Edwards	1929
<i>MACLEAYA</i> <i>tremula</i> Theobald	In fire buckets, rot hole in fork of tree; in and about huts, bite all day, Feb. and May; 32°	Hill	1922
<i>MALAYA</i> <i>genuostris</i> Leicester	---; ---; 32, 148 (Leaf axils of large <i>Arum</i> and <i>Colocasia</i>)	Steffan	1966
<i>leei</i> (Wharton)	Leaf axils of <i>Colocasia</i> ; Jan.; 148	Steffan	1966
<i>solomonis</i> (Wharton)	Axils of swamp plants; ---; 283	Belkin	1962
<i>MANYONIA</i> <i>affinis</i> (Theobald)	---; ---; 148 (Attracted to roots of <i>Fistia stratiotes</i> , bites chiefly at night)	Steffan	1956
<i>annulifera</i> (Theobald)	---; ---; 148 (Fresh water ponds, pools, backwaters, marshes with <i>Fistia</i> and <i>Eichornia</i> , bites man) ---; ---; 148 (Ponds, swamps overgrown with vegetation) ---; ---; 148°	Farner et al. Knight et al. Delphinado	1946 1944 1966
<i>nebulosa</i> Dobrotworsky	---; bites by day, Dec.-Feb.; 32°	Dobrotworsky	1965
<i>provisoria</i> Theobald	Swamps; ---; 107	Lever	1944 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>MANSONIA bonne-wepsterae</i> Assem	Roots of <i>Pistia stratiotes</i> and <i>Hydrocharis asiatica</i> in heavily polluted water; bites man after sunset and in daytime in wet, shady areas; 148°	Steffan	1966
<i>crassipes</i> (van der Wulp)	---; ---; 32, 50, 107, 148, 219 (Drain in grassy swamp) ---; July-Aug., Oct.-Nov.; 66°. ---; ---; 107°, 219°. ---; bites in woods, Jan., Oct.-Dec.; 236° (Grassy pools, swamps or lakes attached to submerged plants, resting in dense vegetation) Small lakes in association with <i>Ipomoea</i> ; ---: 107, 148, 219 Swamps with vegetation; May, Aug.; 107 At 1700 meters elevation; ---; 148 Aquatic plants in fresh water swamps; ---; 219 ---; ---; 283	Knight et al. Bohart Lee Lever Bonne-Wepster Perry Stone et al.	1944 1957 1944 1944 1948 1950 1959
<i>dives</i> (Schiner)	---; ---; 32, 50, 148 (Forest swamps, among rootlets of trees, rattans and palms, indoors and outdoor biters)	Delfinado	1966
<i>fijiensis</i> Belkin	Swamp, pit, attached to <i>Eleocharis articulata</i> ; in the bush; 107	Belkin	1962
<i>giblini</i> (Taylor)	---; ---; 32, 50, 148	Stone et al.	1959
<i>indiana</i> Edwards	On <i>Pistia</i> plants; ---; 148° (Vector of <i>Wuchereria bancrofti</i>) ---; ---; 148 (Associated with <i>Pistia</i> , common in lakes, fouled by coconut husks, enters houses, bites man) ---; ---; 148 (Swamps and pools overgrown with vegetation)	Farner Steffan Knight et al.	1943 1966 1944
<i>irregularis</i> (Walker)	---; ---; 222	Lee	1944
<i>littoralis</i> (Skuse)	---; bites by day, common, Dec.-Mar.; 32° ---; ---; 32	Dobrotworsky Lee	1965 1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>MANSONIA</i> <i>longipalpis</i> van der Wulp	<i>Pistia</i> plants; ---; 50, 148	Farner et al.	1946
<i>lutea</i> Belkin	Edge of swamp in wooded area in very shallow water at the base of a <i>Pandanus</i> , attached to roots in a swamp, fresh water lagoon; wooded areas around swamps, in tents; 283°	Belkin	1962
<i>melanesiensis</i> Belkin	---; vicious day and night biter, in villages, with partially developed <i>Wuchereria bancrofti</i> larvae; 283°	Belkin	1962
<i>memorans</i> Bonne-Wepster	---; ---; 148	Bonne-Wepster	1930 a
<i>nigrochracea</i> (Bonne-Wepster)	---; ---; 148	Bonne-Wepster	1930 a
<i>ochracea</i> (Theobald)	---; ---; 148	Bonne-Wepster	1930 a
<i>papuensis</i> (Taylor)	---; bites in the early evening; 148° ---; ---; 148	Steffan	1966
<i>septempunctata</i> Theobald	---; ---; 32, 50, 148	Knight et al.	1944
<i>tenuipalpis</i> (Edwards)	---; ---; 222	Lee	1944
<i>uniformis</i> (Theobald)	---; ---; 32, 50, 148, 283 (Anthropophilic and persistent biters, active day and night, enters houses). Mangrove swamp; ---; 148 ---; ---; 32, 50, 148, 283 (Swamps and pools overgrown with vegetation) ---; ---, 32 (Eager biter, host of <i>Wuchereria bancrofti</i>) Attached to roots of giant grasses in soft-bottom marshes; nocturnal; 148°	Farner et al.	1946
	At 50 - 2,250 meters elevation; July-Sept., Dec.; 148	Knight et al.	1944
	On <i>Pistia</i> and <i>Eichhornia</i> ; ---; 148	Martini	1930
	---; ---; 148*	Steffan	1966
		Bonne-Wepster	1948
		Farner	1943
		Raghavan	1961

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>MANSONIA</i> <i>variegata</i> Dobrotworsky	---; bites man after sunset; 32°	Dobrotworsky	1965
<i>xanthogaster</i> (Edwards)	---; ---; 32, 183. Grassy swamps; ---; 219. Dwarf <i>Pandanus</i> in water 1-3 feet deep in heavily shaded overgrown fresh-water swamps; persistent and vicious biters; 220°	Belkin	1962
	---; ---; 107	Lever	1945
	---; ---; 148	Lee	1944
	<i>Pandanus</i> , <i>Lemna</i> and <i>Nymphaea</i> , in large fresh water swamp; bite during day; 220°	Perry	1946
	Attached to submerged fleshy roots, stems and leaves of aquatic vegetation; all year; 220	Perry	1949 a
	---; ---; 222	Knight et al.	1944
<i>MANSONOIDES</i> <i>africanus</i> Theobald	Swamps; ---; 32°	Hill	1922
<i>indiana</i> Edwards	---; naturally infected with <i>Wuchereria bancrofti</i> ; 148	Manson-Bahr	1959
<i>longipalpis</i> (van der Wulp)	---; ---; 148*	Manson-Bahr	1959
<i>pauensis</i> (Taylor)	---; naturally infected with <i>Wuchereria bancrofti</i> ; 148*	Manson-Bahr	1959
	---; experimentally infected with <i>W. bancrofti</i> ; 148	Raghavan	1961
<i>septempunctata</i> Theobald	---; ---; 32	Hill	1922
<i>uniformis</i> Theobald	Swamps; ---; 32°	Hill	1922
	---; ---; 32,	Taylor	1918
	---; naturally and experimentally infected with <i>Wuchereria bancrofti</i> ; 148. ---; naturally infected with <i>W. bancrofti</i> ; 283	Raghavan	1961
	---; ---; 148*	Manson-Bahr	1959
<i>MAJIGEELIA</i> <i>argyropus</i> (Walker)	Artificial containers in or near native bush; ---; 222	Belkin	1962

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>MEGARHINUS</i> <i>inornatus</i> Walker	Clear and murky water in coconut husks and tin cans in jungle; inside buildings during day; 50 old stump of sago palm; ---; 50 ---; ---; 50, 97 (Treeholes, artificial containers) Coconut husks; ---; 107 Predaceous; ---; 134 Tree holes, artificial containers in secluded places; ---; 148	Laird Taylor Knight et al. Paine Bohart & Ingram Hill	1946 1934 1944 1934 1946 1925
<i>speciosus</i> Skuse	Treeholes; ---; 32 Artificial containers; ---; 32 Cannibalistic; ---; 32 ---; ---; 107, 148 (Treeholes, artificial containers)	Mackerras Cooling Ferguson Knight et al.	1928 1924 b 1926 a 1944
<i>splendens</i> Wiedemann	Treeholes, coconut husks, leaf axils of <i>Colocasia</i> and <i>Alocasia</i> , artificial containers, predaceous; ---; 107 Bamboo stumps; tree trunks by night in swamp land along the coast; 107 ---; June; 107 (Treeholes, leaf axils of <i>Colocasia</i> , artificial containers) ---; at 50 meters elevation; 148	Paine Lever Bonne-Wepster	1943 1941 1948
<i>splendens</i> <i>splendens</i> Wiedemann	---; ---; 107, 148	Knight et al.	1944
<i>splendens</i> <i>subulifer</i> Doleschall	---; ---; 148	Knight et al.	1944
<i>MELANOCONION</i> <i>ornatus</i> Theobald	---; ---; 148	Edwards	1924
<i>pallidiceps</i> Theobald	---; ---; 148	Edwards	1924
<i>MIMETEOMYIA</i> <i>atripes</i> Skuse	Dense scrub in rain-forest; May; 32	Hill	1922

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>MIMETEOMYIA</i>			
<i>hilli</i> Taylor	Predaceous; ---; 32	Taylor	1917
<i>ornata</i> Taylor	---; ---; 32	Taylor	1917
<i>pulcherrima</i> Taylor	Rothole in tree; May; 32	Hill	1922
<i>quasiornata</i> Taylor	---; ---; 32	Taylor	1917
<i>MIMOMYIA</i>			
<i>metallica</i> Leicester	---; ---; 32	Taylor	1929
<i>MUCIDUS</i>			
<i>alternans</i> (Westwood)	Salt waters, predaceous; bites in the evening, annoying near mud flats; 32°	Mackerras	1928
	Shallow swamp; in bushes, grass and scrub, attracted into house by lights, Jan.-March and May-July; 32	Hill	1922
	Fresh or slightly brackish swamps; ---; 32	Hill	1925
	---; ---; 148, 222 (Shallow swamps)	Edwards	1924
<i>kermorganti</i> (Laveran)	---; ---; 219	Edwards	1922a
	---; ---; 222	Edwards	1924
<i>MYZORHYNCHUS</i>			
<i>barbirostris</i>	Springs and streams; ---; 32°	Hill	1917
var. <i>bancrofti</i> Giles	---; ---; 32	Taylor	1915
<i>NEOMACLEAYA</i>			
<i>australis</i> Taylor	---; ---; 32	Taylor	1915
<i>NEOSQUAMOMYIA</i>			
<i>breinli</i> Taylor	Pools, hollow logs; July; 148	Taylor	1914a
<i>NYSORHYNCHUS</i>			
<i>annulipes</i> Walker	Stagnant pools along creek beds and water holes, backwater of sluggish streams, fresh water swamps, drying mangrove swamps, crabhole, hollow tree trunks, artificial containers, near dwellings; nocturnal, diurnal, enter houses, bites in the open before sunset; 32°	Hill	1917
	---; ---; 32*	Siler et al.	1926
	---; ---; 148	Hill	1925

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>NYSORHYNCHUS</i> <i>annulipes</i> var. <i>moluccensis</i> Swellengrebel	---; ---; 148	Hill	1925
<i>OCHLEROTATUS</i> <i>notoscriptus</i> (Skuse)	Rotholes and pools on fallen tree trunks, cut-off palm trunks, fire buckets, fresh and brackish water in rockholes near beach; ravines on mountain side, all year; 32° ---; ---; 32	Hill Taylor	1922 1918
<i>quasirubrithorax</i> Theobald	On bark of tree near margin of water in rothole; May; Hill 32	Hill	1922
<i>vigilax</i> Skuse	Mangrove swamps, tidal creeks, fresh water swamps, open well in garden, rockhole near beach, tidal swamps marshes and creeks; in scrub, bite day and night, indoors and out, Sept.-June; 32°	Hill	1922
<i>vittiger</i> Skuse	Small shallow, fresh-water swamp at foot of slopes; Hill in dwellings, bite rather painful, Feb., March, May, July, Sept. and Oct.; 32°	Hill	1922
<i>OPIFEX</i> <i>fuscous</i> Hutton	---; ---; 165, 222 (Rock pools above high-water mark and on sides below water surface, with brackish water containing <i>Enteromorpha</i> , bites man at night and produce a most painful bite) Semi-saline pools just above high water and frequently splashed by spray; night biter; 222° ---; rocky coasts; 222	Belkin Graham Edwards	1962 1939 1924
<i>ORTHOPODOMYIA</i> <i>andamanensis</i> Barraud	---; ---; 148 (Treeholes, bamboo stumps, artificial containers, bites by day)	Steffan	1966
<i>PARDOMYIA</i> <i>aurantia</i> Theobald	Muddy ditch with some algal scum and water in hoof marks; ---; 283	Paine & Edwards	1929
<i>PSEUDOSKUSEA</i> <i>basalis</i> Taylor	Crabholes containing salt water, putrifying mangrove leaves; mangroves, Feb.-March, day and night biter; 32° ---; ---; 32	Hill Taylor	1917 1915
<i>cairnsensis</i> Taylor	---; ---; 32	Taylor	1918
<i>PSEUDOTAENIORHYNCHUS</i> <i>conopas</i> var. <i>giblini</i> Taylor	---; ---; 148	Taylor	1914 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>PSEUDOTAENIORHYNCHUS</i> <i>samoensis</i> (Theobald)	---; ---; 263	Theobald	1914
<i>RACHIONOTOMYIA</i> <i>argenteiventris</i> (Theobald)	---; ---; 148	Edwards	1924
<i>argyropus</i> (Walker)	Shaded tanks surrounded by bush, shallow dishes; in bush on tree trunks, under dead nikau, tree fern leaves, under eaves of huts, indoors, Oct.-May; 222	Graham	1929
	Artificial containers around cottages; night biter; 222°	Graham	1939
<i>atra</i> (Taylor)	---; ---; 148	Edwards	1924
<i>atripes</i> (Skuse)	Treeholes; in heavily timbered areas; 32°	Mackerras	1928
	Water butts and tanks; ---; 32	Edwards	1924
<i>bimaculipes</i> (Theobald)	---; ---; 148	Edwards	1924
<i>caledonica</i> Edwards	Pitcher plants; ---; 219	Edwards	1924
	---; common; 219. Narrow, deep cavity between the main branches of a <i>Poinciana</i> tree, crabholes; ---; 220	Buxton & Hopkins	1927
<i>cephasi</i> Edwards	---; Feb.; 32	Edwards	1923
<i>filipes</i> (Walker)	---; ---; 32, 148	Edwards	1924
	Leaf axils of a large wild Aroid and in leaves on the ground in forest, predaceous and cannibalistic; ---; 283	Paine & Edwards	1929
<i>littlechilli</i> Edwards	---; ---; 148	Edwards	1930
<i>magnesiana</i> Edwards	---; ---; 32	Edwards	1924
<i>ornata</i> (Taylor)	---; ---; 148	Edwards	1924
<i>purpurata</i> Edwards	Artificial container; ---; 107	Edwards	1924
	---; ---; 107°	Veitch & Greenwood	1924

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>RACHIONOTOMYIA</i> <i>quasiornata</i> (Taylor)	Dense tropical scrub; May, June and Nov.. scrub-covered ravine on mountain side; 32 ---; ---; 50	Hill Edwards	1922 1924
	Treeholes; diurnal; 148	Hill	1925
<i>rotundata</i> Edwards	---; April; 107	Edwards	1929
<i>solomonis</i> Edwards	Coconut husks; ---; 283 ---; in houses; 283	Paine & Edwards	1929
	---; ---; 283	Edwards	1924
<i>tasmaniensis</i> Strickland	---; ---; 32	Edwards	1924
<i>RACHISOURA</i> <i>aira</i> (Taylor)	---; ---; 148	Cooling	1924 a
<i>atripes</i> (Skuse)	Treeholes, rainwater tanks and other artificial containers; ---; 32	Cooling	1924 b
<i>caledonica</i> Edwards	---; ---; 219	Cooling	1924
<i>cephasi</i> Edwards	---; ---; 32	Cooling	1924
<i>filipes</i> (Walker)	---; ---; 32, 148	Cooling	1924
<i>ornata</i> (Taylor)	---; ---; 148	Cooling	1924
<i>pulcherrima</i> (Taylor)	---; ---; 32	Cooling	1924
<i>purpurata</i> Edwards	---; ---; 107	Cooling	1924
<i>quasiornata</i> (Taylor)	---; ---; 32, 50	Cooling	1924
<i>REEDOMYIA</i> <i>pampangensis</i> (Ludlow)	Hoof-holes in boggy ground, rock crevices; day and night biter; 32° ---; ---; 32	Hill Taylor	1917 1915
<i>SCUTOMYIA</i> <i>notoscripta</i> Skuse	---; day and night biter; 32° ---; ---; 32	Hill Taylor	1917 1913

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>SKUSEA</i> <i>fusorea</i> Theobald	Algea and grass covered seepage, fresh water pools, salt puddles in mangrove swamps; in and around huts, Feb., March and April; 32° ---; ---; 148	Hill Taylor	1922 1914
<i>pseudomediofasciata</i> Theobald	---; ---; 32	Taylor	1918
<i>uniformis</i> Theobald	---; ---; 32	Taylor	1915
<i>STEGOMYIA</i> <i>atra</i> Taylor	---; June; 148	Taylor	1914 a
<i>atripes</i> (Skuse)	---; ---; 32	Taylor	1915
<i>daliensis</i> Taylor	---; ---; 32	Taylor	1917
<i>fasciata</i> Fabilius	Clean water; domestic, day biter, suspected vector of dengue; 32° Rothole in tree; in houses, all year; 32 ---; experimentally infected with <i>Wuchereria bancrofti</i> , common; 83 ---; ---; 107°	Hill Hill McKenzie Veitch & Greenwood	1917 1922 1925 1921
	Small collections of clear water, artificial containers; near dwellings; 134	van Dine	1904
	---; July; 148	Taylor	1914 a
	Standing water; bites in evening, in fields and in bushes; 263°	Doane	1914
	---; Feb.; 263	Theobald	1914
<i>hilli</i> Taylor	Spring; March and April; 32°	Hill	1917
<i>notoascripta</i> Skuse	---; July; 148	Taylor	1914 a
<i>ermita</i> Taylor	---; ---; 148	Taylor	1914 a

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>STEGOMYIA pseudoscutellaris</i> Theobald	Treeholes, coconut husks, rotting vegetation, artificial containers in shade; in houses and bushes, naturally and experimentally infected with <i>Wuchereria bancrofti</i> , diurnal; 83° ---; ---; 107°	McKenzie Veitch & Greenwood	1925 1921
	Standing water; common about houses, bites man day and evening, host of filaria, possible vector of dengue; 263°	Doane	1914
<i>pulcherrima</i> Taylor	---; ---; 32	Taylor	1918
<i>punctolateralis</i> Theobald	---; ---; 32	Taylor	1918
<i>quasiornata</i> (Taylor)	---; ---; 32	Taylor	1915
<i>scutellaris</i> Walker	---; day biter, indoors; 32° Small natural collections of water in the forest, leaves of plants and the hollow decayed stumps of trees and branches; shady places; 134 ---; ---; 148	Hill van Dine Taylor	1917 1904 1914 a
<i>tasmaniensis</i> Strickland	---; ---; 32	Taylor	1917
<i>TAENIORHYNCHUS africanus</i> (Theobald)	---; ---; 32	Edwards	1924
<i>annuliferus</i> (Theobald)	---; ---; 32, 148	Cooling	1924
<i>annulipes</i> (Walker)	---; ---; 32, 148	Edwards	1924
<i>brevicellulus</i> Theobald	On masses of algae on surface of rockhole; April, rare; 32 ---; ---; 50. ---; cane-grass flats, in dense jungle and in open scrub country; 148 ---, ---; 107, 219	Hill Hill Edwards	1922 1925 1924
	---; ---; 107°	Veitch & Greenwood	1921
<i>crassipes</i> van der Wulp	---; ---; 32	Taylor	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TAENIORHYNCHUS giblini</i> (Taylor)	---; ---; 32 ---; ---; 148	Taylor Edwards	1944 1924
<i>iracundus</i> (Walker)	Pools in sunny, sheltered creek beds with strong smelling decaying vegetation; bite day and night; 222°	Graham	1939
	---; ---; 222	Edwards	1924
<i>linealis</i> (Skuse)	---; rare; 32°	Mackerras	1928
	---; ---; 32	Edwards	1924
<i>littleri</i> Taylor	---; ---; 32	Cooling	1924
<i>papuensis</i> Taylor	---; common in cane-grass swamps and adjacent jungle; 148	Hill	1925
	---; ---; 148	Edwards	1924
<i>septempunctata</i> Theobald	---; ---; 148	Taylor	1914 a
<i>tenuipalpis</i> Edwards	---; bites at night, Jan. and May; 222° ---; ---; 222	Graham Edwards	1939 1924
<i>uniformis</i> Theobald	Adapted to sub-aquatic aerial respiration through roots or stems of water plants, <i>Pistia</i> ; enters houses to bite; 32°	Cilento	1924
	Artificial containers; in long grass near water courses and fresh water swamps, in dwellings by day and night, day and night biter; 32°	Hill	1917
	---; ---; 32, 148	Edwards	1924
	---; ---; 50. Weedy fresh-water swamps and backwaters, mangroves; persistent biter, active throughout the day and night; 148°	Hill	1925
	---; ---; 283	Edwards	1941
<i>uniformis</i> var. <i>australiensis</i> Giles	---; bite day and night, in bush and in houses, suspected vector of <i>Muchlereria malayi</i> , June-July; 32°	Taylor	1943
<i>xanthogaster</i> (Edwards)	---; ---; 32	Edwards	1924

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>THEOBALDIA</i>			
<i>atra</i> Lee	---; ---; 32	Lee	1944 b
<i>frenchi</i> (Theobald)	---; ---; 32	Edwards	1924
<i>hilli</i> Edwards	---; ---; 32	Lee	1944
<i>inconspicua</i> Lee	Fresh water rock and ground pools; ---; 32	Lee	1944
<i>littleri</i> (Taylor)	---; ---; 32	Edwards	1924
<i>tonnoiri</i> Edwards	---; ---; 222	Lee	1944
<i>weindorferi</i> Edwards	---; ---; 32	Lee	1944
<i>THEOBALDINELLA</i>			
<i>tonnoiri</i> Edwards	---; ---; 222	Miller	1950
<i>TOPOMYIA</i>			
<i>papuensis</i> Marks	Axils of a crinum-like plant growing in deep shade; April; 148	Steffan	1966
<i>TOXORHYNCHITES</i>			
<i>amboinensis</i> (Doleschall)	---; ---; 148	Steffan	1966
<i>brevipalpis</i> Theobald	---; ---; 134, 263 (Treeholes, artificial containers; cannibalistic)	Belkin	1962
<i>inornatus</i> (Walker)	Treeholes, artificial containers; ---; 32 ---; ---; 32, 50, 107, 148 (Treeholes, coconut husks, artificial containers) ---; ---; 97	Lee Belkin Stone et al.	1944 1962 1959
<i>speciosus</i> (Skuse)	Treeholes, artificial containers, predaceous; ---; 32 Rockhole in fork of tree; ---; 32 ---; ---; 32, 107, 148 (Treeholes, tanks, small wells, artificial and natural containers, predaceous)	Lee Hill Steffan	1944 1922 1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TOXORHYNCHITES splendens</i> (Wiedemann)	---; ---; 107, 148, 263 (Treeholes, bamboo stumps, invades artificial containers)	Belkin	1962
	---; ---; 107, 134, 148, 263 (Natural and artificial containers, predaceous)	Steffan	1966
	Treeholes, bamboo, occasionally in artificial containers, water butts; ---; 148	Lee	1944
<i>splendens subulifer</i> (Doleschall)	---; ---; 148	Steffan	1966
<i>TRIPTEROIDES adentata</i> Assem	In climbing <i>Nepenthes</i> ; virgin rainforest at 457 meters altitude; 148	Steffan	1966
<i>alboscutellatus</i> Lee	Treeholes in sago swamp and in rain forest; ---; 148	Lee	1945
<i>altivallis</i> Bonne-Wepster	---; ---; 148	Steffan	1966
<i>argenteiventris</i> (Theobald)	---; in shady jungle, seldom bites, rest on tree buttress; 50°	Laird	1946
	---; ---; 50, 148 (Artificial containers, coconuts, tree holes, bites man, March-April, Sept., Oct.)	Steffan	1966
	Treeholes, coconut shells and artificial containers; ---; 148	Lee	1945
	Axils of floral bracts of <i>Circuma</i> sp.; ---; 148	Lee	1944
	---; at 1200-1800 meters elevation, Feb.; 148	Bonne-Wepster	1948
<i>argyropus</i> (Walker)	Artificial containers around houses; nocturnal; 222°	Lee	1945
	---; domestic; 222	Lee	1944
<i>ater</i> (Taylor)	---; bites by day in creeks, in rain and mossy forest; 148°	Lee	1945
	---; ---; 148	Penn	1947
<i>atripes</i> (Skuse)	Treeholes, artificial containers; bites by day; 32°	Dobrotworsky	1965
<i>atripes</i> <i>atripes</i> (Skuse)	Treeholes, rainwater, tanks, water barrels; ---; 32	Knight et al.	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TRIPTEROIDES</i>			
<i>atripes</i> <i>occidentalis</i> Brug	---; ---; 148	Knight et al.	1944
<i>atripes</i> <i>punctolateralis</i> (Theobald)	Treeholes, artificial containers; ---; 32	Knight et al.	1944
<i>bimaculipes</i> (Theobald)	---; bites by day; 32° (Treeholes, sago swamp, coconut shells, artificial container). Coconut shells and artificial containers; bites in scrub and around jungle margins; 148° Coconut husks, tree holes, bamboo stumps, pitcher; ---; 50, 148	Lee	1945
	---; ---; 50, 148 (Hollow logs, tree holes, coconut shells, artificial containers, sago swamps and rain forests, bites man all day)	Steffan	1966
	<i>Nepenthes</i> ; ---; 148	Brug	1934
<i>binotatus</i> Belkin	Tree holes, leaf axils of taro, artificial containers; ---; 283	Belkin	1950
<i>bisquamatus</i> Lee	Pitcher plants, climbing <i>Nepenthes</i> ; ---; 148 <i>Nepenthes</i> in swampy grassland; ---; 148 ---; at 1200-1600 meters elevation; 148	Steffan	1966
<i>bonneti</i> Belkin	Airplane wing tank used to catch rain water; ---; 268	Belkin	1962
<i>brevipalpis</i> Brug	---; ---; 148 (Bamboo stumps, cut bamboo)	Steffan	1966
<i>brevirhynchus</i> Brug	<i>Nepenthicolous</i> sp.; ---; 32	Lee	1945
<i>brugi</i> (Edwards)	---; ---; 148	Lee	1944
<i>caledonicus</i> (Edwards)	Tree holes, coconut husk, pitcher plants and artificial containers; ---; 219 Tree holes, plant axils, coconut halves and husks, bamboo stumps, artificial containers; rest on tree trunks; 220	Perry	1950
		Perry	1946

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TRIPTEROIDES</i>			
<i>coheni</i> Belkin	Tree holes, hollow stump, with clear or turbid water; ---; 283	Belkin	1950
<i>collessi</i> Lee	Tree holes; ---; 32	Lee	1945
<i>concinus</i> Lee	---; at 1,400 meters elevation; 148 ---; March; 148°	Lee Steffan	1945 1966
<i>confusus</i> Lee	Artificial containers, coconut shells; ---; 148 ---; at 50-1800 meters elevation; 148	Steffan	1966
<i>cuttsi</i> Assem	In <i>Nepenthes</i> ; moss forest at 1,829 meters elevation, bites by day; 148°	Bonne-Wepster	1948
<i>digoensis</i> Brug	<i>Nepenthes</i> ; ---; 148	Brug	1934
<i>distigma</i> (Edwards)	Tree hole; in house; 283	Belkin	1962
<i>elegans</i> Brug	Pitcher plants; ---; 148 ---; at light; 148	Knight et al. Lee	1944 1945
<i>exnebulis</i> Bonne-Wepster	---; at 1800 meters elevation, Dec., Jan.; 148	Bonne-Wepster	1948
<i>felicitatis</i> Bonne-Wepster	---; at 1800 meters elevation; 148	Bonne-Wepster	1948
<i>filipes</i> (Walker)	Leaf axils of Aroid and leaves on ground; ---; 32, 148, 283 Pitcher plants; ---; 32°. <i>Pandanus</i> and coconut centers; ---; 148°. Wild Aroid and fallen leaves; ---; 283 ---; ---; 32, 50, 148, 283 (Leaf axils, tree holes, predaceous) ---; ---; 32, 50, 148 (Pitcher plants, <i>Nepenthes</i> , grassy swamps, bites man)	Lee Knight et al. Steffan	1944 1945 1966
	Leaf axil of <i>Colocasia</i> ; ---; 50	Laird	1946
	Rot holes in trees; ---; 50	Taylor	1934

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TRIPTEROIDES</i> <i>flabelligera</i> Bonne-Wepster	---; at 2100 meters elevation; 148	Bonne-Wepster	1948
<i>floridensis</i> Belkin	Leaf axils of banana; ---; 283	Belkin	1950
<i>folicola</i> Belkin	Leaf axils; ---; 220	Belkin	1962
<i>fuliginosus</i> Lee	---; buttress of rain-forest tree; 148	Lee	1945
<i>fuscipleura</i> Lee	Leaf axils of taro, small stump hole; ---; 148	Steffan	1966
<i>kingi</i> Lee	Pitcher plants; bites by day; 148°	Lee	1945
	Leaf axils of taro, small stump hole; ---; 148	Steffan	1966
<i>latisquamata</i> (Edwards)	---; at 1,400 meters elevation; 148°	Lee	1945
	---; ---; 148	Lee	1944
<i>leei</i> Peters	Axils of <i>Curcuma</i> , tree holes; ---; 148	Steffan	1966
<i>Lipovskyi</i> Belkin	Tree holes, coconut shells, leaf axils of sago, bamboo stubble, artificial containers; occasionally bite man by day in jungle swamp areas, rest on tree buttresses; 283°	Belkin	1950
<i>littlechildi</i> (Edwards)	---; ---; 148	Steffan	1966
<i>longipalpus</i> Lee	Cut bamboo in rain forest, pitcher plant at 1,600 meters elevation; ---; 148	Lee	1945
<i>lovengauai</i> Peters	Tree holes along shaded riverside; ---; 50	Steffan	1966
<i>magnesianus</i> (Edwards)	---; in rain forest; 32°	Lee	1945
	---; ---; 32	Lee	1944
<i>marksae</i> Dobrotworsky	Hollow tree stump, artificial containers; ---; 32	Dobrotworsky	1965
<i>mathesonii</i> Belkin	Leaf axils of taro, predaceous and cannibalistic; taro plants by day, all year; 283	Belkin	1950

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TRIPTEROIDES melanesiensis</i> Belkin	---; ---; 183, 219, 220, 268 (Tree holes, bamboo, coconut husks and shells, palm bracts, rock pool, artificial containers)	Belkin	1962
<i>microlepis</i> (Edwards)	---; bites by day in high mountains; 148°	Lee	1945
	---; March, April; 148	Steffan	1966
<i>nissanensis</i> Lee	Tree holes; ---; 50	Steffan	1966
<i>novochanoverae</i> Peters	Tree holes, bamboo stumps; ---; 50	Steffan	1966
<i>obscurus</i> Brug	<i>Nepenthes</i> ; ---; 148	Brug	1934
<i>ornata</i> (Taylor)	---; ---; 148	Lee	1944
<i>pallidus</i> Lee	Pitcher plants; bites in sago swamps and in rain forest; 148°	Lee	1945
<i>papua</i> Brug	<i>Nepenthicolous</i> sp.; ---; 148	Lee	1945
<i>perplexus</i> Peters	Tree holes; March; 148	Steffan	1966
<i>pilosus</i> Lee	Pitcher plants; ---; 148	Steffan	1966
<i>plumiger</i> Bonne-Wepster	---; at 1200 meters elevation; 148	Bonne-Wepster	1948
<i>punctolateralis</i> (Theobald)	Water butts and tanks, rot holes in fallen logs; ---; 32°	Lee	1945
	---; ---; 32, 148 (Water butts and tanks, rot holes in fallen logs, bites man, Nov.)	Steffan	1966
<i>purpuratus</i> (Edwards)	Tree fern stump, tree holes, coconut husks; ---; 107	Paine	1943
	Cut bamboo; ---; 107	Belkin	1962
	Artificial containers; ---; 107	Lee	1945
	---; ---; 148 (Tree holes, artificial containers)	Knight et al.	1944
<i>quasiornatus</i> (Taylor)	Tree holes; ---; 32, 283	Lee	1944
	---; ---; 32, 148, 283 (Tree holes, leaf axils of banana and taro)	Knight et al.	1944

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TRIPTEROIDES</i> <i>quasiornatus</i> (Taylor) (cont.)	Shady, fresh, clear, murky water with organic content, coconut husks, tree holes, artificial containers; vicious biters, in houses and jungle by day; 50°	Laird	1946
	Leaf axils of banana and <i>Colocasia</i> , rot holes in trees; ---; 50	Taylor	1934
<i>rotumanus</i> (Edwards)	---; ---; 97	Stone et al.	1959
	Artificial containers in deep shade in the bush area on edge of village; ---; 107	Belkin	1962
<i>simplex</i> Brug	Pitcher plant; ---; 148	Knight et al.	1944
<i>solomonis</i> (Edwards)	---; ---; 219 (Tree holes, bamboo stubbles, papaya stumps, artificial containers)	Steffan	1966
	Semi-domestic, small natural and artificial containers, tree holes, papaya stumps, bamboo stubble, water collection in canvas, water is extremely foul with large amount of decaying organic matter; a pest around human dwellings, attracted to artificial light; 283	Belkin	1962
	Common along the coast, tree holes, papaya stump, bamboo stubble, artificial container with foul water and decaying organic matter; attracted to lights, enters houses; 283°	Belkin	1950
	Coconut shells, coral pockets with high concentrations of dissolved organic tannins; ---; 283	Perry	1949
<i>splendens</i> Lee	---; inside tents; 148°	Lee	1945
<i>standfasti</i> Peters	Axils of <i>Curcuma</i> , coconut shells; Jan., Feb.; 148	Steffan	1966
<i>stonei</i> Belkin	Commonly found in tree holes, bamboo stubble, artificial containers; in field resting in coconut shells and on buttresses of trees in swampy areas, abundant during rainy season, all year, bites by day; 283°	Belkin	1950
<i>subnudipennis</i> (Edwards)	---; at 2,400 meters elevation; 148	Steffan	1966
<i>subobscurus</i> Lee	<i>Nepenthes</i> ; ---; 32 ---; ---; 148 (<i>Nepenthes</i>)	Lee	1945
		Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TRIPTEROIDES</i>			
<i>sylvestris</i> (Theobald)	---; ---; 32	Lee	1944
<i>tasmaniensis</i> (Strickland)	Common in elevated woodlands, artificial containers; bites by day; 32°	Dobrotworsky	1965
	Rock pools, tree holes; ---; 32	Lee	1944
<i>tityae</i> Slooff	---; ---; 148	Steffan	1966
<i>torokinæ</i> Belkin	Tree holes; Nov.; 283	Belkin	1950
<i>vanleeuweni</i> (Edwards)	---; ---; 148	Steffan	1966
<i>URANOTAENIA</i>			
<i>albescens</i> Taylor	Clear, shallow, grassy pools of water, in kerosene tins and water butts; March, July; 32	Taylor	1913
	Wheel ruts; ---; 32, 148, 283	Lee	1944
	Stream with marginal vegetation, <i>Pandanus</i> swamp; ---; 50	Laird	1946
	---; ---; 50 (Artificial containers, shallow grassy pools, wheel ruts, March, Aug.)	Steffan	1966
	---; ---; 283 (Clear, shallow grassy pools, artificial containers)	Knight et al.	1944
<i>albosternopleura</i> Peters	Small rock pool; May, Aug.; 148	Steffan	1966
<i>amiensis</i> Peters	River edges; March-April, Nov.; 148	Steffan	1966
<i>antennalis</i> Taylor	---; ---; 32, 148	Steffan	1966
<i>argyrotarsis</i> Leicester	Limestone pot holes, tree holes; in shady forest near streams, rest on cliffs; 50	Laird	1946
	Small collections of casual ground waters, not fully exposed to sunlight; ---; 50	Taylor	1934
	---; ---; 50, 148, 283 (Forest streams, tree holes, shaded temporary ground pools and leafy forest swamps)	Delfinado	1966
	---; ---; 50, 148, 283 (Sago swamp pools, artificial containers)	Steffan	1966
	Rut-hole at the base of large tree in forest behind plantation, foul water and contaminated with decayed leaves; ---; 283	Paine & Edwards	1929

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>URANOTAENIA</i> <i>atra</i> Theobald	---; ---; 32, 50, 148 (Fallen leaves, fallen coconut bracts, coconut shells, tree holes, sago swamp ground pools, crab holes, artificial containers)	Steffan	1966
	---; ---; 148 (Crab holes, stagnant pools, swamps, brackish water on coral islet)	Barraud	1934
	Slightly brackish water pools in open sunlit areas, crab holes, stagnant pools or swamps with nipa palms, and forest streams; ---; 283	Belkin	1953
<i>barnesi</i> Belkin	---; ---; 220, 283 (Dense fresh water jungle swamps, small pools, rock and side pools of densely shaded jungle streams, prefer shade, tree buttresses)	Belkin	1962
	Dense, fresh-water jungle swamps with high organic content, in shade, occasionally in sun, small pools, road ruts, occasionally in rock pools and stream side pools; rest on tree buttresses i... jungle, active ...	Belkin	1953
<i>cairnsensis</i> Taylor	---; ---; 32	Taylor	1918
<i>civinakii</i> Belkin	In shade, fresh clear water, in jungle streams, side pools, rock pools and stream beds, swamps, spring-fed pools, seepage areas, occasionally in sun; fly by day, rest in shade; 283	Belkin	1953
<i>colocasiæ</i> Edwards	Fallen seeds, pods, small rock pools in stream pools in stream bed, palm and banana leaves, bamboo stumps, tree holes with decaying organic matter, artificial containers, coconut husks, <i>Alocasia</i> leaf axils; predaceous; 107	Paine	1943
	Taro axils, small water collections in living plants and dead plant material, artificial containers, common in <i>Colocasia</i> and <i>Alocasia</i> leaf axils, coconut shells and spathes and large fallen leaves or fronds on ground, in cut bamboo and tree stumps, prefer fairly fresh water; ---; 283	Belkin	1962
<i>diagonalis</i> Brug	---; ---; 50 (Leaf axils of <i>Curcuma</i>)	Steffan	1966
	Axils and floral bracts of <i>Curcuma</i> sp.; ---; 148	Lee	1944
<i>fimbriata</i> King & Hoogstraal	---; March; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>URANOTAENIA</i>			
<i>gerdae</i> Slooff	Large clear, cool rock pools; Jan.; 148	Steffan	1966
<i>hilli</i> Taylor	Crab holes in mangrove swamp; ---; 32	Taylor	1918
<i>hirsutifemora</i> Peters	---; Feb., Nov.; 148	Steffan	1966
<i>lateralis</i> Ludlow	---; ---; 32, 50, 148, 283 (Forest streams, grassy puddles and brackish nipa palm swamps, crab holes and stagnant pools)	Delfinado	1966
	Slightly brackish sunlit water pools; ---; 283	Belkin	1962
<i>moresbyensis</i> Peters	---; Feb.; 148	Steffan	1966
<i>neotibialis</i> King & Hoogstraal	Swamp ground pools; March-April; 148	Steffan	1966
<i>nigerrima</i> Taylor	Coconut flower-bracts, coconut shells; ---; 50, 148	Lee	1944
	Jungle covered ravine; ---; 50	Hill	1925
	Clear water in artificial container; ---; 50	Laird	1946
	Water held by a large leaf of a forest tree; ---; 148	Taylor	1934
	---; ---; 283 (Water in large leaf)	Knight et al.	1944
<i>nivipes</i> (Theobald)	---; ---; 32	Edwards	1924
<i>norvigiensis</i> Peters	Edge of slow running stream in partial shade; rest in shaded hole of river bank, Jan., April, Oct.; 148	Steffan	1966
<i>novaguineensis</i> <i>altisola</i> Peters	---; May; 148	Steffan	1966
<i>painei</i> Edwards	Rock pools in stream beds, shallow ground puddles at edge of small flood stream, may contain algae and the cast skins of crabs; along river banks; 107	Belkin	1962
<i>papua</i> Brug	Cup fungus, artificial containers, spathes, leaves, inflorescences of <i>Curema</i> , sago swamp, ground pools; ---; 148	Steffan	1966

TABLE 1 - MOSQUITOES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>URANOTAENIA</i>			
<i>paralateralis</i> Peters	---; May-June; 50	Steffan	1966
<i>paranovaguinensis</i> Peters	Edge of slow running stream in partial shade; rest in shaded holes in river bank, Apr., Sept.-Oct.; 148	Steffan	1966
<i>propria</i> Taylor	---; enters houses; 32	Taylor	1913
<i>pygmaea</i> Thubald	Fresh water surface pools and swamps; ---; 32	Lee	1944
<i>quadrimaculata</i> Edwards	Seepage swamp, clear, occasionally cloudy water, coconut husks, wheel ruts in sun or shade; active by day; 50	Laird	1946
	<i>Colocasia</i> leaf axils, coconut husk; ---; 50, 148	Lee	1944
	Fallen banana leaves; ---; 50, 148	Taylor	1934
	Leaf axils of taro, tree holes, coconut shells, fallen leaves, artificial containers, occasionally in fallen bamboo and tree scums, prefers fresh water, usually with organic matter; rests in breeding places; 283	Belkin	1953
<i>setosa</i> King & Hoogstraal	Ground pools at edge of sago swamps, grassy ditches; Jan.-Feb., April-May; 148	Steffan	1966
<i>seximurei</i> Belkin	Dense jungle swamps; rare species; 283	Belkin	1953
<i>solomonis</i> Belkin	Ground pools, in open, occasionally in shade, temporary pools, ruts, spring, streams, stagnant water, artificial containers; rest in vegetation and on tree buttresses, fly by night; 283	Belkin	1953
<i>subtibialis</i> King & Hoogstraal	---; April; 148	Steffan	1966
<i>tasmaniensis</i> (Taylor)	---; ---; 32	Cooling	1924
<i>tibialis</i> Taylor	---; ---; 32	Edwards	1924
	Grassy swamps, densely shaded jungle, over-flow of streams, shallow stream pools; rest on trees and overhanging stream banks in jungle; 220	Perry	1946

TABLE 1 -- MOSQUITOES (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>URANOTAENIA</i> <i>tibioclada</i> King & Hoogstraal	Swamp ground pools; Feb., Aug., Dec.; 148	Steffan	1966
<i>wysockii</i> Belkin	Leaf axils of <i>Pandanus</i> , in densely shaded nipa-palm swamp, occasionally in open; ---; 283	Belkin	1953

TABLE 2 - SUMMARY OF DISEASES OR DISEASE ORGANISMS TRANSMITTED BY MOSQUITOES

SPECIES	DISEASE ORGANISM					DISTRIBUTION
	VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER		
<i>AEDES</i> <i>aegypti</i> (Linnaeus)	Dengue					32, 107, 134, 219, 220, 283
		Filariasis				97
<i>albopictus</i> (Skuse)	Dengue					134
<i>argenteus</i> Poiret	Dengue and Yellow fever					32
	Dengue and Yellow fever					107
<i>kochi</i> Dönnitz		<i>Wuchereria</i> <i>bancrofti</i>				32, 148
<i>polynesiensis</i> Marks		Filariasis				107
<i>pseudoscutellaris</i> (Theobald)		Non-periodic filariasis				97, 107
		Filariasis				245
		Filaria- sis				263
<i>scutellaris</i> Walker		<i>Wuchereria</i> <i>bancrofti</i>				107
	Dengue					148
<i>scutellaris</i> <i>pseudoscutellaris</i> (Theobald)		Filariasis				97, 107, 199, 263
		Non-periodic <i>Wuchereria</i> <i>bancrofti</i>				107
		Non-periodic filariasis				205
<i>scutellaris</i> <i>tongae</i> Edwards		Non-periodic filariasis				114
<i>scutellaris</i> var. <i>variegata</i> Doleschall		Filariasis				283

TABLE 2 - MOSQUITOES (continued)

SPECIES	DISEASE ORGANISM					DISTRIBUTION
	: VIRUS &	:	PROTOZOA	:	HELMINTHS	
	: RICKETTSIA	:		:	OTHER	
<i>AEDES</i>						
<i>variegatus</i>					<i>Filaria bancrofti</i>	107
Doleschall					Filariasis	148, 263
<i>variegatus</i>					Non-periodic filariasis	114
<i>torgae</i>						
Edwards						
<i>vigilax</i>					Non-periodic filariasis	219
(Skuse)						
<i>ANOPHELES</i>						
<i>aconitus</i>					<i>Wuchereria bancrofti</i>	148
Dönitz						
<i>amicus</i>					<i>Wuchereria bancrofti</i>	32
Edwards						
<i>annulipes</i>		Malaria				32
Walker					Nocturnal filariasis	50
<i>annulipes</i>		Malaria				32, 148
<i>annulipes</i>						
Walker						
<i>bancrofti</i>		Malaria				32, 148
Giles					Nocturnal filariasis	148
					<i>Wuchereria bancrofti</i>	148 (Farner, 1943)
<i>barbirostris</i>						
var. <i>bancrofti</i>		Malaria			<i>Wuchereria bancrofti</i>	148
Giles						
<i>fasciatus</i>						
Laveran		<i>Plasmodium falciparum</i>				32
		Malaria				50, 148, 220, 268, 283, 289
					<i>Wuchereria bancrofti</i>	148 (Raghavan, 1961)
					Filariasis	220, 283 (Oman & Christenson, 1947)

TABLE 2 - MOSQUITOES (continued)

SPECIES	DISEASE ORGANISM					DISTRIBUTION
	VIRUS &	:	PROTOZOA	:	HELMINTHS	
	RICKETTSIA	:		:	OTHER	
<i>ANOPHELES</i> <i>karwari</i> (James)	Malaria					148
	Nocturnal filariasis					148
	<i>Wuchereria</i> <i>bancrofti</i>					148
<i>koliensis</i> (Owen)	Filariasis					283
<i>lungae</i> Belkin & Schlosser	Malaria					32
<i>punctulatus</i> Donitz	Nocturnal filariasis					50
	Malaria					148, 283
<i>punctulatus</i> <i>farauti</i> Laveran	Malaria					32, 50, 148
	Nocturnal filariasis					50, 121, 283 (Manson- Bahr, 1959)
<i>punctulatus</i> <i>moluccensis</i> Swellengrebel & Swelien- grebel de Graaf	Malaria					32, 50, 220, 283
	<i>Wuchereria</i> <i>bancrofti</i>					283 (Raghavan, 1961)
<i>punctulatus</i> <i>punctulatus</i> Donitz	Malaria	<i>Wuchereria</i> <i>bancrofti</i>				148 (Wilcocks, 1944)
	Nocturnal filariasis					32, 50, 148
	<i>Wuchereria</i> <i>bancrofti</i>					121
						148 (Farner, 1943)
<i>stigmaticus</i> <i>stigmaticus</i> Skuse	Malaria					32
<i>subpictus</i> Grassi	Malaria					148
<i>varuna</i> Iyengar	Malaria					32

TABLE 2 - MOSQUITOES (conclusion)

SPECIES	DISEASE ORGANISM				DISTRIBUTION	
	: VIRUS &	:	: PROTOZOA :	HELMINTHS	OTHER :	
:	:	:	:	:	:	:
<i>CULEX</i>						
<i>annulirostris</i>				Nocturnal filariasis		
Skuse					32, 66, 148	(Manson-Bahr, 1959)
				<i>Wuchereria bancrofti</i>	32, 148	
				Filariasis	219	
<i>bitaeniorhynchus</i>				Nocturnal filariasis		
Giles					148	
<i>cilaris</i>				Nocturnal filariasis		
(Linnaeus)					32	
<i>fatigans</i>				Filariasis	32, 199	
Wiedemann				<i>Wuchereria bancrofti</i>	148	
	Dengue			Elephantiasis	263	
<i>pipiens</i>						
<i>fatigans</i>				Nocturnal filariasis		
Wiedemann					32, 66	
<i>quinquefasciatus</i>				Filariasis	32, 220, 263, 283	
Say				<i>Wuchereria bancrofti</i>	219	
<i>MANSONIA</i>						
<i>uniformis</i>				<i>Wuchereria bancrofti</i>		
Theobald					148	
<i>MANSONOIDES</i>						
<i>longipalpis</i>				Nocturnal filariasis		
(van der Wulp)					148	
<i>paupensis</i>						
(Taylor)				Nocturnal filariasis		
<i>uniformis</i>					148	
Theobald				Nocturnal filariasis		
<i>NYSORHYNCHUS</i>						
<i>annulipes</i>			Malaria			
Walker					32	

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B. BLACK FLIES

The black fly entries include little on biology and disease--most of the recorded information is on distribution. In the tables are listed 58 species or subspecies.

TABLE 1 - BLACK FLIES

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AUSTROSIMULIUM australense</i> (Schiner)	On aquatic vegetation of small rivulets, grass blades, leaves dipping into the water; ---; 222° ---; ---; 222	Tonnoir	1925
<i>bancrofti</i> (Taylor)	Fast-moving, clear to muddy water; ---; 32° ---; March-June; 32	Miller	1950
<i>cornutum</i> Tonnoir	Swift water; ---; 32	Mackerras & Mackerras	1949
<i>crassipes</i> Tonnoir	Mountain streams; ---; 32	Mackerras & Mackerras	1949
<i>fulvicorne</i> Mackerras & Mackerras	Shaded fairly swift, evenly flowing water in a small creek; ---; 32	Mackerras & Mackerras	1950
<i>furiocsum</i> (Skuse)	Moderately, fast, clear, shallow water attached to vegetation; ---; 32°	Mackerras & Mackerras	1949
<i>laticorne</i> Tonnoir	On plants in a swift flowing rivulet; ---; 32 ---; ---; 222	Tonnoir	1925
<i>longicorne</i> Tonnoir	On grasses, water cress leaves or grass blades dipping into the water, small rivulets; ---; 32 ---; ---; 222	Mackerras & Mackerras	1949
<i>magnum</i> Mackerras & Mackerras	Attached to rocks in rapids, in clear, cool, fast-moving water; ---; 32	Mackerras & Mackerras	1955
<i>mirabile</i> Mackerras & Mackerras	Dead leaves in moderately fast, clear water; ---; 32 Small creek; Sept.-Dec.; 32	Mackerras & Mackerras	1949
<i>montanum</i> Mackerras & Mackerras	Swift, cold streams; Feb.-March, Sept.-Nov.; 32	Mackerras & Mackerras	1952
<i>multicorne</i> Tonnoir	On grass in small rivulet Dec.-March; 32 ---; ---; 222	Tonnoir	1925
<i>rectilinea</i> Mackerras & Mackerras	Attached to sticks, logs, stumps and dead leaves in torrential, turbulent and muddy streams; ---; 32°	Mackerras & Mackerras	1948

TABLE 1 - BLACK FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AUSTROSIMULIUM</i> <i>simile</i> Tonnoir	Small creeks, rivers, on leaves, grass blades or bits of reeds dipping into the water; Nov.-Jan.; 32	Tonnoir	1925
<i>tasmaniense</i> Tonnoir	On stones of small and medium-sized cracks, grass blades dipping in small rivulets with moderately swift current; ---; 32	Tonnoir	1925
<i>tillyardi</i> Tonnoir	On shingles; all year; 32 ---; ---; 222	Tonnoir Mackerras & Mackerras	1925 1949
<i>torrentium</i> Tonnoir	On stones, cataract gorge, river shingles and creek; Oct., Nov., Jan.-Feb.; 32	Tonnoir	1925
<i>torrentium</i> <i>hilli</i> Mackerras & Mackerras	Swift clear water; ---; 32	Mackerras & Mackerras	1949
<i>torrentium</i> <i>torrentium</i> Tonnoir	Swift flowing large streams; ---; 32	Mackerras & Mackerras	1949
<i>ungulatum</i> Tonnoir	---; all year; 32° ---; ---; 222	Tonnoir Mackerras & Mackerras	1925 1949
<i>vexans</i> Mik.	---; ---; 32 ---; ---; 222	Tonnoir Mackerras & Mackerras	1925 1949
<i>victoriae</i> Roubaud	On stones, occasionally on grass blades, in small to medium-sized creeks with moderate flow; ---; 32	Mackerras & Mackerras	1949
<i>weindorferi</i> Tonnoir	In a creek; ---; 32	Tonnoir	1925
<i>CNEPHIA</i> <i>auritacum</i> (Tonnoir)	Fast, clear mountain streams on vegetation; ---; 32	Mackerras & Mackerras	1949
<i>fergusoni</i> (Tonnoir)	---; ---; 32°	Mackerras & Mackerras	1949
<i>strenua</i> Mackerras & Mackerras	Rocks sheltered below brink in fast water; ---; 32	Mackerras & Mackerras	1950
<i>terebrans</i> (Tonnoir)	---; ---; 32°	Mackerras & Mackerras	1949

TABLE 1 - BLACK FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CNEPHIA</i> <i>tonnoiri</i> <i>fuscoflava</i> (Mackerras & Mackerras)	Small, fast clear water; ---; 32	Mackerras & Mackerras	1949
<i>tonnoiri</i> <i>orientalis</i> Mackerras & Mackerras	Moderate to fast, clear water, turbulent streams; ---; 32	Mackerras & Mackerras	1950
<i>umbratorum</i> (Tonnoir)	On reeds of gently flowing water, small sluggish channel; ---; 32	Mackerras & Mackerras	1952
<i>SIMULIUM</i> <i>adamseni</i> Edwards	---; ---; 199	Edwards	1932
<i>aurantiacum</i> Tonnoir	On stones of a fall or cascade, swift running creek; Oct.-Dec.; 32	Tonnoir	1925
<i>aureonigrum</i> Mackerras & Mackerras	Attached to rock and dead leaves, small shaded stream; ---; 32	Mackerras & Mackerras	1950
	---; ---; 32	Mackerras & Mackerras	1955
<i>bancrofti</i> Taylor	---; ---; 32	Taylor	1927
<i>buisseoni</i> Roubaud	---; ---; 199	Buxton & Hopkins	1927
	---; ---; 199°	Mumford & Adamson	1934
<i>buissoni</i> var. <i>gallinum</i> Edwards	---; ---; 199	Edwards	1932
<i>cheesmanae</i> Edwards	---; ---; 281	Edwards	1935
<i>clathrinum</i> Mackerras & Mackerras	On stone, grass blades in swiftly flowing, clear water; ---; 32	Mackerras & Mackerras	1949
	Coastal streams, jungle creek; Jan., April, May and Sept.; 32	Mackerras & Mackerras	1950
<i>faheyi</i> Taylor	Attached to reeds and grass, in moderately fast, smooth flowing water; ---; 32	Mackerras & Mackerras	1950
	---; ---; 32°	Mackerras & Mackerras	1949
<i>fergusoni</i> Tonnoir	---; ---; 32°	Tonnoir	1925

TABLE 1 - BLACK FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>SIMULIUM</i> <i>guamense</i> Stone	---; ---; 197	Stone	1964
<i>inornatum</i> Mackerras & Mackerras	On rock, dead leaves and roots of semi-aquatic plants, in small, shady creek with moderately fast, running, clear water; ---; 32	Mackerras & Mackerras	1950
<i>laciniatum</i> Edwards	---; ---; 107	Buxton & Hopkins	1927
<i>melatum</i> Wharton	Edge of fast clear stream, tributary of fresh water creek; ---; 32	Mackerras & Mackerras	1950
<i>mumfordi</i> Edwards	---; ---; 199	Edwards	1932
<i>nicholsoni</i> Mackerras & Mackerras	Attached to submerged vegetation, dead sticks and leaves or logs in moderately fast, clear to muddy water; ---; 32	Mackerras & Mackerras	1949
	---; March-June; 32°	Mackerras & Mackerras	1948
<i>oculata</i> (Enderlein)	---; ---; 148	Lee	1948
<i>ormeipes</i> Skuse	On stones and vegetation, in moderate or sluggish clear water; ---; 32	Mackerras & Mackerras	1949
	---; Feb.-June; 32	Mackerras & Mackerras	1948
	Attached to the under surface of stones in a small fairly rapidly moving stream; ---; 148	Lee	1948
<i>oviceps</i> Edwards	---; ---; 281	Edwards	1935
<i>palauense</i> Stone	---; ---; 236	Stone	1964
<i>papuensis</i> Lee	---; ---; 148	Lee	1948
<i>peregrinum</i> Mackerras & Mackerras	On reeds, sticks and dead leaves in swifter parts of small, clear, shaded creeks; ---; 32	Mackerras & Mackerras	1950
<i>tahitiensis</i> Edwards	---; ---; 281	Edwards	1935
<i>terebrans</i> Tonnoir	---; ---; 32°	Tonnoir	1925
<i>torresianum</i> Mackerras & Mackerras	Dead twigs in a small, clear rather sluggish creek with sandy bottom; ---; 32	Mackerras & Mackerras	1955

TABLE I - BLACK FLIES (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>SIMULIUM</i> <i>trukenense</i> Stone	---; ---; 66, 197	Stone	1964
<i>umbratorum</i> Tonnoir	---; ---; 32	Tonnoir	1925
<i>wilhelmlandiae</i> Smart	---; ---; 148	Lee	1948

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C. SAND FLIES

The sand fly entries include a few species of Psychodinae which do not bite but may be pests of man, often causing allergic reactions. Little is to be found in the literature on the biologies and disease transmission of these species. Most of the data are distributional records.

The tables include 6 species or subspecies most of which are in the large genus *Phlebotomus*.

TABLE 1 - SAND FLIES

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>PERICOMA townsvillensis</i> Taylor	---; indoors, severe biter; 32°	Taylor	1915
<i>PHLEBOTOMUS brevitilis</i> Tonnoir	---; in houses, Nov.-March; 32	Tonnoir	1935
<i>englishi</i> Tonnoir	---; Dec.-April; 32	Tonnoir	1935
<i>queenslandi</i> Hill	---; in houses, rare, Jan.; 32	Tonnoir	1935
<i>queenslandi meridionalis</i> Tonnoir	---; rare, Dec.-April; 32	Tonnoir	1935
<i>squamipleuris</i> Newstead	---; ---; 32 (May bite man)	Dicke & Hsiao	1946

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D. MIDGES

The midges include representatives from the family Ceratopogonidae. In some areas, the biting species, especially *Culicoides*, are called "sand flies". Little is known of the biology of individual species; however, the larvae are known to occur either in water or in most terrestrial environments. In addition to being quite important as pests, these biting midges are vectors for several disease organisms.

The tables include 44 species or subspecies, most of which are in the large genus *Culicoides*.

TABLE 1 - MIDGE

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ACANTHOCONOPS</i>			
<i>myuret</i> Tonnoir	---; ---; 222°	Tonnoir	1924
<i>CULICOIDES</i>			
<i>aerariensis</i> Skuse	---; ---; 32	Kieffer	1917
<i>ardentissimus</i> Tokunaga	---; ---; 66	Tokunaga	1940 a
<i>australiensis</i> Kieffer	---; ---; 148	Vargas	1949
<i>brevitarsis</i> Kieffer	---; ---; 32	Vargas	1949
<i>canorisocius</i> Macfie	---; ---; 107	Vargas	1949
<i>decomponatus</i> Skuse	---; ---; 32	Kieffer	1917
<i>esaki</i> Tokunaga	Mountain streams; common; 66	Farner	1944
	---; ---; 66°	Tokunaga	1940 a
<i>flavimaculinotalis</i> Tokunaga	---; ---; 66	Tokunaga	1940
<i>gutifer</i> var. <i>histrio</i> Johannae	---; ---; 197	Vargas	1949
<i>jurtipennis</i> de Meijere	---; ---; 32	Kieffer	1917
<i>insulicola</i> Macfie	---; ---; 281	Vargas	1949
<i>kuwaniensis</i> Tokunaga	---; ---; 66	Tokunaga	1940
<i>lineatus</i> Kieffer	---; ---; 148	Vargas	1949
<i>marmoratus</i> (Skuse)	---; ---; 32	Vargas	1949
<i>melanosticta</i> Macfie	---; ---; 148	Vargas	1949
<i>minusculus</i> Skuse	---; ---; 32	Kieffer	1917

TABLE 1 - MIDGEES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CULICOIDES</i>			
<i>molestus</i> (Skuse)	---; ---; 32	Vargas	1949
<i>mollis</i> Edwards	---; ---; 107	Lever	1944
	---; ---; 263	Vargas	1949
<i>multimaculatus</i> (Skuse)	---; ---, 32	Vargas	1949
<i>nigellus</i> Skuse	---; ---; 32	Kieffer	1917
<i>nubeculosus</i> Meigen	---; ---; 1	Gutzevich	1960
<i>ornatus</i>	---; common in mangrove areas; 32	Seddon	1951
<i>oxystoma</i> Kieffer	---; ---; 32	Edwards	1929
<i>peliliouensis</i> Tokunaga	Mangrove swamps; bites man; 236°	Tokunaga & Esaki	1936
<i>peregrinus</i> Kieffer	---; ---; 205	Barnett & Toshioka	1951
<i>peregrinus</i> <i>assamensis</i> Smith & Swaminath	---; ---; 66	Tokunaga	1940
<i>rabauli</i> Macfie	---; ---; 148	Vargas	1949
<i>salinarius</i> Kieffer	---; alkaline reservoirs; 83	Gutzevich	1960
<i>shortii</i> Smith & Swaminath	---; ---; 32	Vargas	1949
<i>subnitidus</i> Skuse	---; ---; 32	Kieffer	1917
<i>sydneyensis</i> Skuse	---; ---; 32	Kieffer	1917
<i>townsvillensis</i> Taylor	---; ---; 32	Vargas	1949
<i>victoriæ</i> Macfie	---; ---; 32	Vargas	1949
<i>xanthoceras</i> Kieffer	---; ---; 148	Vargas	1949

TABLE 1 - MIDGES (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>LEPTOCONOPS</i>			
<i>albiventris</i> de Meijere	---; very common, May; 148°	de Meijere	1915
<i>groundis</i> Skuse	---; ---; 32	Lee	1948
<i>longicornis</i> Carter	---; bite by day; 32°	Carter	1921
<i>spinocipes</i>	---; ---; 148	Kieffer	1917
<i>stygius</i> Skuse	---; ---; 32	Carter	1921
<i>woodhilli</i> Lee	---; ---; 32	Lee	1948
<i>STYLOCONOPS</i>			
<i>albiventris</i> (de Meijere)	---; ---; 50, 148°, 199	Lee	1948
<i>australiensis</i> Lee	---; ---; 32°	Lee	1948
<i>myersi</i> (Tonnoir)	---; ---; 222°	Lee	1948

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E. HORSE FLIES

The entries for horse flies (Tabanidae) include very little biology. Most of the literature on this large and important group is concerned with taxonomy, a lesser amount on distribution and little on disease transmissions.

The synonymy, both at the genus and the species level, is very complex. Several specialists are currently striving to straighten out some of these problems.

In the tables are listed 750 species or subspecies, but it is certain that many of these are not valid names.

TABLE 1 - HORSE FLIES

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>APHOPEAS</i> <i>nigripes</i> Kröber	---; ---; 222	Kröber	1931
<i>truncatus</i> Walker	---; ---; 222	Kröber	1931
<i>APOCAMPAT</i> <i>sutcana</i> Walker	---; ---; 32°	Ferguson & Hill	1922
<i>ARCHEOKYL</i> <i>fulvus</i> Ricardo	---; ---; 32	Philip	1941
<i>AUSTROPLEX</i> <i>brevipalpis</i> (Macquart)	---; ---; 32	Mackerras	1956
<i>chrysophilus</i> (Walker)	---; ---; 32	Mackerras	1956
<i>goldfinchi</i> Mackerras	---; ---; 32	Mackerras	1956
<i>CAENOPROSOPON</i> <i>australis</i> (Ricardo)	---; ---; 32	Mackerras	1956
<i>leptoi</i> Mackerras	---; ---; 32	Mackerras	1960
<i>haworthi</i> Taylor	---; ---; 32	Taylor	1917
<i>tritomae</i> (Taylor)	---; ---; 32	Mackerras	1956
<i>nigrovittatus</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1956
<i>tritomae</i> sp. (Bigot)	---; ---; 32	Mackerras	1956
<i>rubripicta</i> Ricardo	---; ---; 32	Ferguson & Henry	1919
<i>CHALYBODROMIA</i> <i>spicata</i> (Wiedemann)	---; ---; 32	Mackerras	1959
<i>schuurmans</i> (Schuurmans Stekhoven)	---; ---; 148	Oldroyd	1948

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CHALYBOSOMA</i> <i>malkini</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>metallicum</i> (Ricardo)	---; ---; 148	Oldroyd	1948
<i>CHASMIA</i> <i>basifasciata</i> (de Meijere)	---; ---; 148	Oldroyd	1948
<i>bincta</i> Enderlein	---; ---; 148	Oldroyd	1948
<i>CHASMIELLA</i> <i>breviusculus</i> (Walker)	---; ---; 148	Oldroyd	1948
<i>fasciata</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>fulgidus</i> (Ricardo)	---; ---; 148	Oldroyd	1948
<i>ochrothorax</i> Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
<i>papouiniae</i> (Walker)	---; April; 148	Oldroyd	1948
<i>parva</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>parvicallosa</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>raffrayi</i> (Bigot)	---; ---; 148	Oldroyd	1948
<i>subhastata</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>CHRYSOPS</i> <i>albicincta</i> van der Wulp	---; ---; 148	Oldroyd	1948
<i>australis</i> Ricardo	---; ---; 32	Taylor	1926
<i>australis</i> <i>papuensis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>signifer</i> Walker	---; ---; 148	Taylor	1945

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CHrysops</i> <i>testaceus</i> Macquart	---; ---; 32	White	1915
<i>COENOPROSOPON</i> <i>hamlyni</i> Taylor	---; ---; 32	Ferguson & Hill	1922
<i>CORIZONEURA</i> <i>anthracina</i> Macquart	---; ---; 32	White	1915
<i>chrysophilia</i> Walker	---; ---; 32	Ferguson & Hill	1922
<i>fulva</i> Macquart	---; ---; 32	Taylor	1917
<i>kurandae</i> Taylor	---; ---; 32	Taylor	1917 a
<i>montana</i> Hutton	---; ---; 222	Kröber	1931
<i>rufovittata</i> Macquart	---; ---; 32	White	1915
<i>CYDISTOMYIA</i> <i>albidosegmentata</i> (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
<i>albithorax</i> Ricardo	---; ---; 148	Oldroyd	1948
<i>alternata</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1959
<i>aluensis</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>atripes</i> (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
<i>atriventer</i> (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
<i>curvibarba</i> Mackerras	---; ---; 148	Mackerras	1964
<i>avida</i> (Bigot)	---; ---; 32	Mackerras	1959
<i>barretti</i> Mackerras	---; ---; 148	Mackerras	1964

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CYDISTOMYIA</i>			
<i>basifasciata</i> (de Meijere)	---; ---; 148	Mackerras	1964
<i>bezzii</i> Mackerras & Rageau	---; ---; 107	Mackerras & Rageau	1958
<i>bisecta</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>breviscula</i> (Walker)	---; ---; 148	Mackerras	1964
<i>caesioides</i> Walker	---; ---; 148	Oldroyd	1948
<i>caledonica</i> (Ricardo)	---; ---; 219	Mackerras & Rageau	1958
<i>cohici</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
<i>colasbellicuri</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
<i>crepuscularis</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>diasi</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
<i>dimorpha</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>doddi</i> Taylor	---; ---; 32	Taylor	1919
<i>duplonotata</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>fasciata</i> (Oldroyd)	---; ---; 148	Mackerras	1964
<i>festiva</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>fulgida</i> (Ricardo)	---; ---; 148	Mackerras	1964
<i>grenieri</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CYDISTONYIA</i> <i>griseiventor</i> (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
<i>heydoni</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>hollandiensis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>hyperythrea</i> (Bigot)	---; ---; 32	Mackerras	1959
<i>imitans</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>immatura</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>immigrans</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>inopinata</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>insularis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>kuniae</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
<i>laetus</i> (de Meijere)	---; ---; 148	Oldroyd	1948
<i>lamellata</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>laticallosa</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>laticallosa</i> <i>heroni</i> (Ferguson)	---; ---; 32	Mackerras	1959
<i>latisegmentata</i> (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
<i>latistriata</i> (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
<i>lifuensis</i> (Bigot)	---; ---; 183	Mackerras & Rageau	1958
	---; ---; 219	Mackerras	1962

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CYDISTOMYIA</i>			
<i>limbatella</i> (Bezzi)	---; ---; 107	Mackerras & Rageau	1958
<i>lorentzi</i> Ricardo	---; ---; 148	Oldroyd	1948
	---; ---; 283	Mackerras & Rageau	1958
<i>macmillani</i> Mackerras	---; ---; 148	Mackerras	1964
<i>magnetica</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1959
<i>mascali</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
<i>misimensis</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>nana</i> Mackerras & Rageau	---; ---; 148	Mackerras	1964
	---; ---; 283	Mackerras & Rageau	1958
<i>nigerrima</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>nigropicta</i> (Macquart)	---; ---; 32	Mackerras	1959
<i>nokensis</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>ochrothorax</i> (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
<i>oldroydi</i> Mackerras	---; ---; 148	Mackerras	1964
<i>oudella</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>pacifica</i> (Ricardo)	---; ---; 107	Mackerras & Rageau	1958
<i>palmensis</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1959
<i>papouina</i> (Walker)	---; ---; 148	Mackerras	1964
<i>parva</i> (Oldroyd)	---; ---; 148	Mackerras	1964

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CYDISTOMYIA parvicallosa</i> (Oldroyd)	---; ---; 148	Mackerras	1964
<i>perdita</i> Mackerras	---; ---; 148	Mackerras	1964
<i>pseudimmatura</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>quasimmatura</i> Mackerras	---; ---; 148	Mackerras	1964
<i>raffrayi</i> (Bigot)	---; ---; 148	Mackerras	1964
<i>ratcliffei</i> Mackerras & Rageau	---; ---; 283	Mackerras & Rageau	1958
<i>risbeci</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
<i>roubaudi</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
<i>similis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>sol</i> (Schuurmans Stekhoven)	---; ---; 148	Oldroyd	1948
<i>solomensis</i> (Ricardo)	---; ---; 148	Mackerras	1964
	---; ---; 283	Mackerras & Rageau	1958
<i>subhastata</i> (Oldroyd)	---; ---; 148	Mackerras	1964
<i>sylviodes</i> (Walker)	---; ---; 148	Mackerras	1964
<i>torresi</i> (Ferguson & Hill)	---; ---; 148	Mackerras	1964
<i>toumanoffi</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
<i>variegata</i> (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
<i>veitchi</i> (Bezzi)	---; ---; 107	Mackerras & Rageau	1958
	---; ---; 220	Mackerras	1962

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>DASYBASIS</i>			
<i>acutipalpis</i> (Macquart)	---; ---; 32	Mackerras	1959
<i>albohirtipes</i> (Ferguson)	---; ---; 32	Mackerras	1959
<i>angusticallus</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>anomala</i> Mackerras & Rageau	---; ---; 148	Mackerras	1964
	---; ---; 283	Mackerras & Rageau	1958
<i>appendiculata</i> Macquart	---; ---; 32	Mackerras	1959
<i>bratrankii</i> (Nowicki)	---; ---; 222	Mackerras	1957
<i>caesia</i> (Walker)	---; ---; 32, 148	Mackerras	1959
<i>circumdata</i> (Walker)	---; ---; 32	Mackerras	1959
<i>cirrus</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>clavicallosa</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>clavicallosa</i> <i>banksiensis</i> (Ferguson & Hilli)	---; ---; 32	Mackerras	1959
<i>constans</i> (Walker)	---; ---; 32	Mackerras	1959
<i>difficilis</i> (Kröber)	---; ---; 222	Mackerras	1957
<i>dixoni</i> (Ferguson)	---; ---; 32	Mackerras	1959
<i>dubiosa</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>dubiosa</i> <i>indefinita</i> (Taylor)	---; ---; 32	Mackerras	1959
<i>edentula</i> (Macquart)	---; ---; 32	Mackerras	1959

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>DASYBASIS eidevoldensis</i> (Taylor)	---; ---; 32	Mackerras	1959
<i>exultans</i> (Erichson)	---; ---; 32	Mackerras	1959
<i>froggatti</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>gentilis</i> (Erichson)	---; ---; 32	Mackerras	1959
<i>germanica</i> (Ricardo)	---; ---; 32, 148	Mackerras	1959
<i>gregaria</i> (Erichson)	---; ---; 32	Mackerras	1959
<i>grenieri</i> (Mackerras & Rageau)	---; ---; 219	Mackerras	1962
<i>griseoannulata</i> (Taylor)	---; ---; 32	Mackerras	1959
<i>hebes</i> (Walker)	---; ---; 32	Mackerras	1959
<i>hobartiensis</i> (White)	---; ---; 32	Mackerras	1959
<i>imperfecta</i> (Walker)	---; ---; 32	Mackerras	1959
<i>innotata</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1959
<i>irrorata</i> Macquart	---; ---; 148	Mackerras	1964
<i>kewensis</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1959
<i>loewi</i> Enderlein	---; ---; 222	Mackerras	1957
<i>macrophthalma</i> (Schiner)	---; ---; 32	Mackerras	1959
<i>mellicallosa</i> Mackerras & Rageau	---; ---; 148	Mackerras	1964
	---; ---; 268, 283	Mackerras & Rageau	1958

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>LASYBASIS</i>			
<i>milsoniensis</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1959
<i>milsonis</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>moretonensis</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1959
<i>nemopunctata</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>nemotuherculata</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>neobasalis</i> (Taylor)	---; ---; 32	Mackerras	1959
<i>neocirrus</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>neogermanica</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>neolatifrons</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1959
<i>neopalpis</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1959
<i>nigripes</i> Kröber	---; ---; 222	Mackerras	1957
<i>ochreoflava</i> (Ferguson & Henry)	---; ---; 32	Mackerras	1959
<i>ocula</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>opla</i> (Walker)	---; ---; 222	Mackerras	1957
<i>postica</i> (Wiedemann)	---; ---; 32	Mackerras	1959
<i>postponens</i> (Walker)	---; ---; 32	Mackerras	1959
<i>pseudoardens</i> (Taylor)	---; ---; 32	Mackerras	1959
<i>pseudocallosa</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1959

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>DASYBASIS</i>			
<i>rageoui</i> Mackerras	---; ---; 219	Mackerras	1962
<i>rainbowi</i> (Taylor)	---; ---; 32	Mackerras	1959
<i>regis-georgii</i> (Macquart)	---; ---; 32	Mackerras	1959
<i>rubricallosa</i> (Ricardo)	---; ---; 183°, 219	Mackerras & Rageau	1958
<i>rufifrons</i> (Macquart)	---; ---; 32	Mackerras	1959
<i>sarpa</i> (Walker)	---; ---; 222	Mackerras	1957
<i>spadix</i> (Taylor)	---; ---; 32	Mackerras	1959
<i>spaticosa</i> (Ricardo)	---; ---; 32	Mackerras	1959
<i>standfasti</i> Mackerras	---; ---; 148	Mackerras	1964
<i>tasmaniensis</i> (White)	---; ---; 32	Mackerras	1959
<i>thereviformis</i> Mackerras	---; ---; 222	Mackerras	1957
<i>transversa</i> (Walker)	---; ---; 222	Mackerras	1957
<i>trilineatis</i> (Ferguson & Henry)	---; ---; 32	Mackerras	1959
<i>truncata</i> (Walker)	---, ---; 222	Mackerras	1957
<i>trypheira</i> (Taylor)	---; ---; 32	Mackerras	1959
<i>vespiformis</i> (Ferguson & Henry)	---; ---; 32	Mackerras	1959
<i>vetusta</i> (Walker)	---; ---; 32	Mackerras	1959
<i>viridis</i> (Hudson)	---; ---; 222	Mackerras	1957

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>DEMOPLATUS</i>			
<i>australis</i> Ricardo	---; ---; 32	Taylor	1917
<i>nigrovittatus</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1920
<i>trichocerus</i> Macquart	---; ---; 32	Ferguson	1921 a
<i>DIATOMINEURA</i>			
<i>abdominalis</i> Ricardo	---; Nov.-Feb.; 32	Ferguson & Henry	1919
<i>aurata</i> (Macquart)	---; ---; 32	Ferguson	1922
<i>aurifluua</i> Donovan	---; Nov.-March; 32	Ferguson & Henry	1919
<i>auripleura</i> Taylor	---; ---; 32	Taylor	1917
<i>bicolorata</i> Taylor	---; ---; 32	Taylor	1918
<i>brevirostris</i> Macquart	---; Nov.-Dec.; 32	Ferguson & Henry	1919
<i>clavata</i> Macquart	---; Dec.-March; 32	Ferguson & Henry	1919
<i>constans</i> Walker	---; ---; 32	White	1915
<i>crocea</i> Taylor	---; ---; 32	Taylor	1917 a
<i>cydister</i> Taylor	---; ---; 32	Taylor	1918
<i>dorsomaculata</i> Macquart	---; ---; 32	White	1915
<i>fulgida</i> Ferguson & Henry	---; Nov.-March; 32	Ferguson & Henry	1919
<i>gagatina</i> Bigot	---; ---; 32	Taylor	1918
<i>ianthina</i> White	---; ---; 32	Taylor	1919
<i>inflata</i> Ricardo	---; Jan.-March; 32	Ferguson & Henry	1919

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>DIATOMINEURA</i>			
<i>jacksonensis</i> Guerin	---; ---; 32	Taylor	1918
<i>montana</i> Ricardo	---; ---; 32	Taylor	1917
<i>plana</i> Walker	---; ---; 32	Taylor	1918
<i>pulchra</i> Ricardo	---; ---; 32	Taylor	1917
<i>regis-georgii</i> Taylor	---; ---; 32	Taylor	1918
<i>ruficornis</i> Macquart	---; ---; 32	Ferguson	1921a
<i>subappendiculata</i> Macquart	---; ---; 32	Ferguson & Hill	1922
<i>testacea</i> Macquart	---; ---; 32	Taylor	1917
<i>violacea</i> Macquart	---; enters houses; 32	Ferguson & Hill	1922
<i>ECTENOPSIS</i>			
<i>angusta</i> (Macquart)	---; ---; 32	Mackerras	1956
<i>australis</i> Ricardo	---; ---; 32	Ferguson	1921
<i>erratica</i> (Walker)	---; ---; 32	Mackerras	1960
<i>fulva</i> Ferguson	---; ---; 32	Mackerras	1956
<i>hamlyni</i> (Taylor)	---; ---; 32	Mackerras	1956
<i>norrisi</i> Mackerras	---; ---; 32	Mackerras	1956
<i>victoriensis</i> Ferguson	---; ---; 32	Mackerras	1956
<i>vittata</i> Mackerras	---; ---; 32	Mackerras	1956
<i>vulpecula</i> (Wiedemann)	---; ---; 32	Ferguson	1921
<i>vulpecula</i> <i>nigripennis</i> Taylor	---; ---; 32	Taylor	1918

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ELAPHROMYIA</i>			
<i>carteri</i> Taylor	---; ---; 32	Taylor	1917a
<i>EREPHOPSIS</i>			
<i>albibarbus</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>aureohirta</i> Ricardo	---; ---; 32	Ferguson	1921a
<i>aureovestita</i> Ferguson & Henry	---; ---; 32	Ferguson & Henry	1919
<i>bancrofti</i> Austen	---; ---; 32	Taylor	1917a
<i>binotata</i> Latreille	---; ---; 32	Ferguson	1921a
<i>caliginosa</i> Walker	---; ---; 148	Schuurmans Stekhoven	1926
<i>cinerrea</i> Ricardo	---; ---; 32	Taylor	1918
<i>clelandi</i> Ferguson	---; ---; 32	Ferguson	1921
<i>concolor</i> Walker	---; Nov.-March; 32	Ferguson & Henry	1919
<i>contigua</i> Walker	---; ---; 32	Ferguson & Henry	1919
<i>divisa</i> Walker	---; ---; 32	Ferguson	1921a
<i>gemina</i> Walker	---; ---; 32	Ferguson	1921a
<i>gibbula</i> Walker	---; ---; 32	Taylor	1917
<i>guttata</i> Donovan	---; Nov.-March; 32	Ferguson & Henry	1919
<i>jacksoni</i> Macquart	---; ---; 32	Taylor	1918
<i>lasiophthalma</i> Boisduval	---; ---; 32	Ferguson	1921a

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>EREPHOPSIS</i>			
<i>maculipennis</i> Macquart	---; ---; 32	Ferguson	1921a
<i>media</i> Walker	---; ---; 32	Ferguson & Henry	1919
<i>neotricolor</i> Taylor	---; ---; 32	Taylor	1918
<i>niveovittata</i> Ferguson & Henry	---; ---; 32	Ferguson & Henry	1919
<i>novaeguineensis</i> Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
<i>quadrimacula</i> Walker	---; ---; 32	Ferguson	1921a
<i>rufoniger</i> Ferguson	---; ---; 32	Ferguson	1921
<i>subcontigua</i> Ferguson	---; ---; 32	Ferguson	1921
<i>submacula</i> Walker	---; ---; 32	Taylor	1919
<i>submedia</i> Walker	---; ---; 32	Ferguson	1921a
<i>vicina</i> Taylor	---; ---; 32	Taylor	1918
<i>vicina georgii</i> Taylor	---; ---; 32	Taylor	1918
<i>xanthopilis</i> Ferguson	---; ---; 32	Ferguson	1921a
<i>HAEMATOPATA</i>			
<i>javana</i> Wiedemann	---; ---; 148	Schuurmans Stekhoven	1932
<i>JAPENOIDES</i>			
<i>chesemanus</i> Oldroyd	---; ---; 148	Mackerras	1964
<i>festiva</i> (Oldroyd)	---; ---; 148	Mackerras	1964
<i>rataliffei</i> (Mackerras & Rageau)	---; ---; 148	Mackerras	1964

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>LEPTOTABANUS transversus</i> Walker	---; ---; 222	Kröber	1931
<i>LILAEA atriventer</i> Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
<i>de meijerei</i> Ricardo	---; ---; 148	Oldroyd	1947
<i>flavicincta</i> Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
<i>vittata</i> Ricardo	---; ---; 148	Oldroyd	1947
<i>LISSIMAS moluccensis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>philipi</i> Mackerras	---; ---; 148	Mackerras	1964
<i>MESOMYIA alcocki</i> (Summers)	---; ---; 32	Mackerras	1961
<i>ater</i> (Taylor)	---; ---; 32	Mackerras	1961
<i>atrata</i> (Schuurmans Stekhoven)	---; ---; 148	Mackerras	1964
<i>burnsi</i> Mackerras	---; ---; 32	Mackerras	1961
<i>cydister</i> (Taylor)	---; ---; 32	Mackerras	1961
<i>de meijerei</i> (Ricardo)	---; ---; 32	Mackerras	1961
	---; ---; 148	Mackerras	1964
<i>dimidiata</i> (Wulp)	---; ---; 148	Mackerras	1964
<i>distincta</i> Ricardo	---; ---; 32	Mackerras	1961
<i>doddi</i> (Ricardo)	---; ---; 32	Mackerras	1961
<i>equina</i> (Ferguson & Hill)	---; ---; 32	Mackerras	1961

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>MESOMYIA</i>			
<i>femoralis</i> (Ricardo)	---; ---; 148	Mackerras	1964
<i>fergusoni</i> (Ricardo)	---; ---; 32	Mackerras	1961
<i>fuliginosa</i> (Taylor)	---; ---; 32	Mackerras	1961
<i>fulvissima</i> Mackerras	---; ---; 32	Mackerras	1961
<i>fuscipennis</i> (Ricardo)	---; ---; 32	Mackerras	1961
<i>frontalis</i> (Ricardo)	---; ---; 32	Mackerras	1961
<i>grandis</i> (Ricardo)	---; ---; 32	Mackerras	1961
<i>imitator</i> (Ferguson)	---; ---; 32	Mackerras	1961
<i>latifrons</i> Mackerras	---; ---; 32	Mackerras	1961
<i>lunulata</i> (Bigot)	---; ---; 32	Mackerras	1961
<i>lurida</i> (Walker)	---; ---; 32	Mackerras	1961
<i>lyreana</i> Mackerras	---; ---; 32	Mackerras	1961
<i>mansoni</i> (Summers)	---; ---; 32	Mackerras	1961
<i>montana</i> (Ricardo)	---; ---; 32	Mackerras	1961
<i>nigerrima</i> Mackerras	---; ---; 32	Mackerras	1961
<i>nigripennis</i> (Ricardo)	---; ---; 32	Mackerras	1961
<i>norrisi</i> Mackerras	---; ---; 32	Mackerras	1961
<i>obscura</i> Mackerras	---; ---; 32	Mackerras	1961
<i>paralurida</i> (Ferguson & Henry)	---; ---; 32	Mackerras	1961

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>MESOMYIA</i>			
<i>peregrina</i> Mackerras	---; ---; 148	Mackerras	1964
<i>pulla</i> Mackerras	---; ---; 32	Mackerras	1961
<i>queenslandi</i> Ricardo	---; ---; 32	Mackerras	1961
<i>silvester</i> (Sergroth)	---; ---; 32	Mackerras	1961
<i>sulcifrons</i> (Ferguson)	---; ---; 32	Mackerras	1961
<i>stradbrokei</i> (Taylor)	---; ---; 32	Mackerras	1961
<i>taylori</i> Mackerras	---; ---; 32	Mackerras	1961
<i>tepperi</i> (Ferguson)	---; ---; 32	Mackerras	1961
<i>typhera</i> (Taylor)	---; ---; 32	Mackerras	1961
<i>vittata</i> (Ricardo)	---; ---; 148	Mackerras	1964
<i>NEOBOLBODIMYIA</i>			
<i>nigra</i> Ricardo	---; ---; 148	Oldroyd	1948
<i>NEOLEPTABANUS</i>			
<i>transversus</i> Walker	---; ---; 222	Miller	1950
<i>OSCA</i>			
<i>aurata</i> Macquart	---; ---; 32	Ferguson	1924
<i>bicolor</i> Macquart	---; ---; 32	Ferguson	1924
<i>dorsomaculata</i> Macquart	---; ---; 32	Ferguson	1924
<i>guttipennis</i> Ferguson	---; ---; 32	Ferguson	1924
<i>lasiophthalma</i> Macquart	---; ---; 32	Ferguson	1924
<i>limbithorax</i> Macquart	---; ---; 32	Ferguson	1924

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>OSCA</i>			
<i>maculiventris</i> Westwood	---; ---; 32	Ferguson	1924
<i>PALINNECONYIA</i>			
<i>celaenospila</i> Taylor	---; ---; 32	Taylor	1917
<i>walkeri</i> Newman	---; ---; 32	Ferguson & Hill	1922
<i>PANGONIA</i>			
<i>olavata</i> Macquart	---; ---; 32	Ferguson	1916
<i>neocaledonica</i> Megnin	---; ---; 219	Williams	1943
<i>PARACANTHOCERA</i>			
<i>australis</i> Ricardo	---; ---; 32	Oldroyd	1948
<i>PARASILVIUS</i>			
<i>fulvus</i> Ferguson	---; ---; 32	Ferguson	1921
<i>PAREOCOMPSA</i>			
<i>dimidiata</i> van der Wulp	---; ---; 148	Oldroyd	1948
<i>femoralis</i> Ricardo	---; ---; 148	Oldroyd	1948
<i>PAREUCOMPSA</i>			
<i>dimidiata</i> Wulp	---; ---; 148	Oldroyd	1947
<i>femoralis</i> Ricardo	---; ---; 148	Oldroyd	1947
<i>PELECORHYNCHUS</i>			
<i>albolineatus</i> Hardy	---; ---; 32	Ferguson	1921 a
<i>claripennis</i> Ricardo	---; ---; 32	Ferguson	1921
<i>deiquei</i> Hardy	---; ---; 32	Mackerras & Fuller	1942
<i>distinota</i> Taylor	---; ---; 32	Taylor	1918
<i>eristaloides</i> (Walker)	---; ---; 32	Ferguson	1921 a
<i>eristaloides</i> <i>montanus</i> Hardy	---; ---; 32	Hardy	1916

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>PELECORHYNCHUS</i>			
<i>fascipennis</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>flavipennis</i> Ferguson	---; ---; 32	Ferguson	1921
<i>fulvus</i> Ricardo	Mud bank of swamp; ---; 32	Mackerras & Fuller	1942
<i>fusconiger</i> (Walker)	Under short grass tussocks, in mud or merely moist soil, near or far from water; ---; 32	Mackerras & Fuller	1942
<i>fusconiger</i> <i>alpinensis</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>fusconiger</i> <i>fergusoni</i> Hardy	---; ---; 32	Mackerras & Fuller	1942
<i>fusconiger</i> <i>rufibasis</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>igniculus</i> Hardy	---; swamps; 32	Mackerras & Fuller	1942
<i>interruptus</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>kippesi</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>lineatus</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>lunulatus</i> Mackerras & Mackerras	---; ---; 32	Mackerras & Mackerras	1953
<i>maculipennis</i> Macquart	---; ---; 32	Taylor	1917
<i>mirabilis</i> Taylor	---; ---; 32	Mackerras & Fuller	1942
<i>montanus</i> Hardy	---; ---; 32	Mackerras & Fuller	1942
<i>nebulosus</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>PELECORHYNCHUS</i>			
<i>nero</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>niger</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>nigripennis</i> Ricardo	Mud in the center of swamps and weedy-algae covered pools; ---; 32	Mackerras & Fuller	1942
<i>occidens</i> Hardy	---; ---; 32	Mackerras & Fuller	1942
<i>olivei</i> Hardy	---; swamps; 32	Mackerras & Fuller	1942
<i>personatus</i> (Walker)	---; ---; 32	Mackerras & Fuller	1942
<i>rubidus</i> Mackerras & Fuller	In fairly dry mud under short turf; ---; 32	Mackerras & Fuller	1942
<i>rubidus</i> <i>avittatus</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>simplex</i> Mackerras & Fuller	On low shrubs and herbage in small swamps; ---; 32	Mackerras & Fuller	1942
<i>simplissimus</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>taeniatus</i> Mackerras & Fuller	---; ---; 32	Mackerras & Fuller	1942
<i>tillyardi</i> Taylor	---; ---; 32	Taylor	1918
<i>PHIBALOMYIA</i>			
<i>carteri</i> (Taylor)	---; ---; 32	Mackerras	1961
<i>PHILOLCHE</i>			
<i>buxtoni</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
<i>neocalifornica</i> (Megnin)	---; ---; 219	Mackerras & Rageau	1958

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>PHILOLICHE</i> <i>verventi</i> Mackerras & Rageau	---; ---; 219	Mackerras & Rageau	1958
<i>PROTODASYOMMIA</i> <i>loewi</i> Enderlein	---; ---; 222	Kröber	1931
<i>PSEUDOPANGONIA</i> <i>australis</i> Ricardo	---; ---; 32	Mackerras	1961
<i>PSEUDOTABANUS</i> <i>lululentus</i> Hutton	---; ---; 222	Kröber	1931
<i>queenslandi</i> Ricardo	---; ---; 32	Taylor	1920
<i>SCAPTIA</i> <i>abdominalis</i> (Ricardo)	---; ---; 32	Mackerras	1960
<i>adrel</i> (Walker)	---; ---; 222	Kröber	1931
<i>albibarba</i> Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
<i>alpina</i> <i>alpina</i> Mackerras	---; ---; 32	Mackerras	1960
<i>alpina</i> <i>hardyi</i> Mackerras	---; ---; 32	Mackerras	1960
<i>anomala</i> Mackerras	---; ---; 32	Mackerras	1960
<i>auranticula</i> Mackerras	---; ---; 32	Mackerras	1960
<i>aurata</i> (Macquart)	---; ---; 32	Mackerras	1960
<i>cureohirta</i> (Ricardo)	---; ---; 32	Mackerras	1960
<i>curvovestita</i> (Ferguson & Henry)	---; ---; 32	Mackerras	1960
<i>auriflua</i> (Donovan)	---; ---; 32	Mackerras	1960

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>SCAPTIA</i>			
<i>auriflua</i>			
<i>dives</i> (Macquart)	---; ---; 32	Mackerras	1960
<i>aurinotum</i> Mackerras	---; ---; 32	Mackerras	1960
<i>auripilosa</i> Oldroyd	---; ---; 148	Oldroyd	1947
<i>auripleura</i> (Taylor)	---; ---; 32	Mackerras	1960
<i>bancrofti</i> (Austen)	---; ---; 32	Mackerras	1960
<i>barbara</i> Mackerras	---; ---; 32	Mackerras	1960
<i>bernhardi</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>berylensis</i> (Ricardo)	---; ---; 32	Mackerras	1960
<i>bicolor</i> Hudson	---; ---; 222	Kröber	1931
<i>bicolorata</i> (Taylor)	---; ---; 32	Mackerras	1960
<i>binotata</i> (Latreille)	---; ---; 32	Mackerras	1960
<i>brevipalpis</i> Kröber	---; ---; 222	Kröber	1931
<i>brevipalpis</i> <i>palpis</i> Kröber	---; ---; 222	Kröber	1931
<i>bravirostris</i> (Macquart)	---; ---; 32	Mackerras	1960
<i>calabyi</i> Mackerras	---; ---; 32	Mackerras	1960
<i>caligiosa</i> (Walker)	---; ---; 148	Oldroyd	1948
<i>calliphora</i> Mackerras	---; ---; 32	Mackerras	1960
<i>cinerascens</i> (Ricardo)	---; ---; 32	Mackerras	1960

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CAPTIA clavata</i> (Macquart)	---; ---; 32	Mackerras	1960
<i>clelandi</i> (Ferguson)	---; ---; 32	Mackerras	1960
<i>concolor</i> (Walker)	---; ---; 32	Mackerras	1960
<i>divisa</i> (Walker)	---; ---; 32	Mackerras	1960
<i>flavibarbis</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>floccosa</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>fulgida</i> (Ferguson & Henry)	---; ---; 32	Mackerras	1960
<i>gemina</i> (Walker)	---; ---; 32	Mackerras	1960
<i>georgii</i> (Taylor)	---; ---; 32	Mackerras	1960
<i>gibbula</i> (Walker)	---; ---; 32	Mackerras	1960
<i>guttata</i> (Donovan)	---; ---; 32	Mackerras	1960
<i>guttipennis</i> <i>guttipennis</i> (Ferguson)	---; ---; 32	Mackerras	1960
<i>guttipennis</i> <i>occidentalis</i> Mackerras	---; ---; 32	Mackerras	1960
<i>hirticeps</i> (Nowicki)	---; ---; 222	Kröber	1931
<i>ianthina</i> (White)	---; ---; 32	Mackerras	1960
<i>insularis</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>jacksoniensis</i> (Guerin)	---; ---; 32	Mackerras	1960
<i>jacksonii</i> (Macquart)	---; ---; 32	Mackerras	1960

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>SCAPTIA</i>			
<i>lasiophthalma</i> (Macquart)	---; ---; 32	Mackerras	1960
<i>Leonina</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>Lerda</i> (Walker)	---; ---; 222	Kröber	1931
<i>limbithorax</i> (Macquart)	---; ---; 32	Mackerras	1960
<i>maculiventris</i> (Westwood)	---; ---; 32	Mackerras	1960
<i>mafulensis</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>media</i> (Walker)	---; ---; 32	Mackerras	1960
<i>milleri</i> Mackerras	---; ---; 222	Mackerras	1957
<i>minuscula</i> Mackerras	---; ---; 32	Mackerras	1960
<i>montana</i> (Hutton)	---; ---; 222	Mackerras	1957
<i>monticola</i> Mackerras	---; ---; 32	Mackerras	1960
<i>muscula</i> English	---; ---; 32	Mackerras	1960
<i>neococoncolor</i> Mackerras	---; ---; 32	Mackerras	1960
<i>neotricolor</i> (Taylor)	---; ---; 32	Mackerras	1960
<i>nigerrima</i> Mackerras	---; ---; 32	Mackerras	1960
<i>nigrapiroalis</i> Mackerras	---; ---; 32	Mackerras	1960
<i>nigrovinota</i> Mackerras	---; ---; 32	Mackerras	1960
<i>norrisi</i> Mackerras	---; ---; 32	Mackerras	1960
<i>novaeguineensis</i> (Ricardo)	---; ---; 148	Oldroyd	1948

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>SCAPTIA</i> <i>orba</i> Mackerras	---; ---; 32	Mackerras	1960
<i>orientalis</i> Mackerras	---; ---; 32	Mackerras	1960
<i>palpalis</i> Kröber	---; ---; 222	Miller	1950
<i>patula</i> (Walker)	---; ---; 32	Mackerras	1960
<i>pictipennis</i> Mackerras	---; ---; 32	Mackerras	1960
<i>plana</i> (Walker)	---; ---; 32	Mackerras	1960
<i>pulchra</i> (Ricardo)	---; ---; 32	Mackerras	1960
<i>quadrimaculata</i> (Walker)	---; ---; 32	Mackerras	1960
<i>regis-georgii</i> (Taylor)	---; ---; 32	Mackerras	1960
<i>ricardoae</i> (Button)	---; ---; 222	Mackerras	1957
<i>roei</i> (Macleay)	---; ---; 32	Mackerras	1960
<i>rufonigra</i> (Ferguson)	---; ---; 32	Mackerras	1960
<i>similis</i> Mackerras	---; ---; 32	Mackerras	1960
<i>singularis</i> (Macquart)	---; ---; 32	Mackerras	1960
<i>subappendiculata</i> (Macquart)	---; ---; 32	Mackerras	1960
<i>subcana</i> (Walker)	---; ---; 32	Mackerras	1960
<i>subcinerea</i> Mackerras	---; ---; 32	Mackerras	1960
<i>subcontigua</i> (Ferguson)	---; ---; 32	Mackerras	1960
<i>taylori</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>testacea</i> (Macquart)	---; ---; 32	Mackerras	1960

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>SCAPTIA</i>			
<i>testaceomaculata</i> (Macquart)	---; ---; 32	Mackerras	1960
<i>tricolor</i> (Walker)	---; ---; 32	Mackerras	1960
<i>unilineata</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>vertebrata</i> (Bigot)	---; ---; 32	Mackerras	1960
<i>vicina</i> (Taylor)	---; ---; 32	Mackerras	1960
<i>violacea</i> (Macquart)	---; ---; 32	Mackerras	1960
<i>walkeri</i> (Newman)	---; ---; 32	Mackerras	1960
<i>xanthopilis</i> (Ferguson)	---; ---; 32	Mackerras	1960
<i>SILVIUS</i>			
<i>alcocki</i> Summers	---; ---; 32	Taylor	1915
<i>angusticallosus</i> Taylor	---; ---; 32	Taylor	1919
<i>ater</i> Taylor	---; ---; 32	Taylor	1917 a
<i>atripes</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>atriventer</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>australis</i> Ricardo	---; ---; 32	Ferguson	1921 a
<i>borealis</i> Taylor	---; ---; 32	Taylor	1915
<i>de Meyeri</i> Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
<i>dimidiatus</i> van der Wulp	---; ---; 148	Schuurmans Stekhoven	1926
<i>dimidiatus</i> <i>femoralis</i> Ricardo	---; ---; 148	Schuurmans Stekhoven	1926

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>SILVIUS</i> <i>distinctus</i> Taylor	---; ---; 32	Taylor	1926
<i>doddi</i> Ricardo	---; ---; 32	Taylor	1917 a
<i>elongatus</i> Taylor	---; ---; 32	Taylor	1915
<i>elongatus</i> <i>persimilis</i> Taylor	---; ---; 32	Taylor	1919
<i>equinus</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
<i>fergusoni</i> Ricardo	---; Nov.-March; 32	Ferguson & Henry	1919
<i>flavincinctus</i> Schuurmans Stekhoven	---; in forest; 148	Schuurmans Stekhoven	1932
<i>frontalis</i> Ricardo	---; ---; 32	Ferguson	1921 a
<i>fuliginosus</i> Taylor	---; ---; 32	Taylor	1915
<i>fulvohirtus</i> Taylor	---; ---; 32	Taylor	1915
<i>grandis</i> Ricardo	---; ---; 32	Ferguson	1921 a
<i>hackeri</i> Taylor	---; ---; 32	Taylor	1919
<i>hilli</i> Taylor	---; ---; 32	Taylor	1915
<i>imitator</i> Ferguson	---; ---; 32	Ferguson	1921 a
<i>indistinctus</i> Ricardo	---; ---; 32	Ferguson & Hill	1920
<i>insularis</i> Ricardo	---; ---; 32	Ferguson	1921 a
<i>latistriatus</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>luridus</i> Walker	---; ---; 32	Ferguson & Hill	1922

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>SILVIUS</i>			
<i>mansoni</i> Summers	---; ---; 32	Taylor	1915
<i>minor</i> Taylor	---; ---; 32	Taylor	1918
<i>montanus</i> Ricardo	---; ---; 32	Ferguson	1921 a
<i>niger</i> Ricardo	---; ---; 32	Ferguson	1922
<i>nigripennis</i> Ricardo	---; ---; 32	Taylor	1918
<i>nigroapicalis</i> Ferguson	---; ---; 32	Ferguson	1921
<i>nitescens</i> Walker	---; ---; 32	Taylor	1915
<i>notatus</i> Ricardo	---; ---; 32	Ferguson & Hill	1920
<i>paraluridus</i> Ferguson & Henry	---; Nov.-Dec.; 32	Ferguson & Henry	1919
<i>psarophanes</i> Taylor	---; ---; 32	Taylor	1917
<i>silvester</i> Bergroth	---; ---; 32	Taylor	1915
<i>sordidus</i> Taylor	---; ---; 32	Ferguson & Hill	1920
<i>stradbrokei</i> Taylor	---; ---; 32	Taylor	1917
<i>strongmani</i> Summers	---; ---; 32	Taylor	1915
<i>subluridus</i> Taylor	---; ---; 32	Taylor	1917 a
<i>sulcifrons</i> Ferguson	---; ---; 32	Ferguson	1921
<i>tabaniformis</i> Taylor	---; ---; 32	Taylor	1915
<i>tepperi</i> Ferguson	---; ---; 32	Ferguson	1921 a

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>SILVIUS</i>			
<i>trypherus</i> Taylor	---; ---; 32	Taylor	1915
<i>variegatus</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>vicinus</i> Taylor	---; ---; 32	Taylor	1919
<i>vittatus</i> Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
<i>TABANUS</i>			
<i>absterus</i> Walker	---; ---; 32	Austen	1914
<i>acutipalpis</i> Macquart	---; ---; 32	Hardy	1934
<i>adelaidae</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
<i>albidosegmentatus</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>albithorax</i> Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
<i>albithorax</i> <i>brunnifemur</i> Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
<i>albithorax</i> <i>citribarbus</i> Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
<i>albithorax</i> <i>flavifemur</i> Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
<i>albokirtipes</i> Ferguson	---; ---; 32	Ferguson	1921a
<i>alternatus</i> Ferguson & Hill	---; ---; 32	Hardy	1944
<i>alternatus</i> <i>magneticus</i> Ferguson & Hill	---; ---; 32	Hardy	1944

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>anellus</i> Summers	---; ---; 32	Austen	1914
<i>angusticallosus</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>angusticallus</i> Ricardo	---; ---; 32	Ferguson	1921 a
<i>angustilineatus</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>antecedens</i> Walker	---; ---; 32	Hardy	1934
<i>appendiculatus</i> Macquart	---; ---; 32	Hardy	1947
<i>approximatus</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>aprepes</i> Taylor	Swamps of aquatic plants; Oct.-April; 32	Hill	1921
	Sandy bed of creek; ---; 32	Ferguson & Hill	1922
<i>aroeensis</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>atmosphorus</i> Taylor	---; ---; 32	Taylor	1926
<i>aurivittatus</i> Ricardo	---; ---; 148	Oldroyd	1948
<i>australis</i> Taylor	---; ---; 32	Taylor	1917 a
<i>avidus</i> Bigot	---; ---; 32	Ferguson	1921 a
<i>basifasciatus</i> de Meijere	---; June; 148	de Meijere	1915
<i>basii</i> Ferguson	---; ---; 32	Hardy	1934
<i>batchelori</i> Taylor	---; ---; 32	Taylor	1926
<i>bewanensis</i> Oldroyd	---; ---; 148	Mackerras	1964

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>bipunctatus</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>breinli</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
<i>brevidentatus</i> Macquart	---; ---; 32	Taylor	1913 +
<i>brevior</i> Walker	---; ---; 32	Ferguson & Hill	1920
<i>breviusculus</i> Walker	---; June; 148	de Meijere	1915
<i>brevivitta</i> Walker	---; ---; 32	McEachran & Hill	1915
<i>brisbanensis</i> Taylor	---; ---; 32	Taylor	1917
<i>caesius</i> Walker	---; ---; 148	Schuurmans Stekhoven	1932
<i>caledonicus</i> Ricardo	---; ---; 183	Ricardo	1914
<i>ceylonicus</i> Schiner	---; ---; 32	Mackerras & Rageau	1958
	---; ---; 148. ---; very common; 283	Schuurmans Stekhoven	1926
<i>cinerescens</i> Macleay	---; ---; 32	Ferguson	1921 a
<i>cinnamoneus</i> Doleschall	---; ---; 148	Oldroyd	1948
<i>circundatus</i> Walker	---; Nov.-April, on window of houses, 32	Ferguson & Henry	1919
<i>cirrus</i> Ricardo	---; ---; 32	Ferguson & Hill	1922
<i>clavicallosus</i> Ricardo	---; ---; 32	Ferguson	1921 a
<i>clavicallosus</i> <i>banksiensis</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>cohaerens</i> Walker	---; May, August; 148	de Meijere	1915
<i>concolor</i> Walker	---; ---; 32	Mackerras	1959
<i>confusus</i> Taylor	---; ---; 32	Taylor	1917
<i>crypserytherus</i> Taylor	---; ---; 32	Taylor	1919
<i>cyanescens</i> Wiedemann	---; Dec.-March; 32	Ferguson & Henry	1919
<i>daphoenus</i> Taylor	---; ---; 32	Taylor	1919
<i>daruensis</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>darwinensis</i> Taylor	---; ---; 32	Taylor	1917a
<i>davidaeni</i> Taylor	---; Nov.-March; 32	Ferguson & Henry	1919
<i>denticulatus</i> Ricardo	---; ---; 148	Oldroyd	1948
<i>diemanensis</i> Ferguson	---; ---; 32	Ferguson	1921
<i>diminutus</i> Walker	---; ---; 32	Taylor	1918
<i>divisus</i> Ricardo	---; ---; 32	Ferguson & Hill	1922
	---; ---; 148	Oldroyd	1948
<i>dixoni</i> Ferguson	---; ---; 32	Ferguson	1921a
<i>doddi</i> Taylor	---; ---; 32	Hardy	1944
<i>dorsicus</i> Walker	---; ---; 148	Oldroyd	1948
<i>dorsobimaculatus</i> Macquart	---; ---; 32	Mackerras	1959
	---; ---; 148	Mackerras	1964
<i>dubiosus</i> Ricardo	---; ---; 32	Taylor	1917

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>duplicatus</i> Ricardo	---; ---; 32	Ferguson & Hill	1920
<i>edentulus</i> Macquart	---; ---; 32	Taylor	1917
<i>eidsvoldensis</i> Taylor	---; ---; 32	Taylor	1926
<i>exagens</i> Walker	---; ---; 148	Schuurmans Stekhoven	1926
<i>expulsus</i> Walker	---; ---; 220	Ricardo	1914
<i>expulsus</i> <i>expulsus</i> Walker	---; ---; 220	Mackerras & Rageau	1958
<i>expulsus</i> <i>filiarius</i> Ricardo	---; ---; 107	Mackerras & Rageau	1958
<i>exulans</i> Erichson	---; ---; 32	Hardy	1934
<i>fijiensis</i> Ricardo	---; ---; 107°, 220	Ricardo	1914
<i>flavineus</i> Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
<i>flavipennis</i> Ricardo	---; hill and mountainous region, moist places; 148	Schuurmans Stekhoven	1924
<i>flindersi</i> Ferguson	---; ---; 32	Ferguson	1921a
<i>froggatti</i> Ricardo	Soil on banks of permanent swamp, under grass; feed on small flowers in pasture and on low growing <i>Leptospermum</i> on hill slopes; 32°	Fuller	1937
<i>fugitivus</i> Taylor	---; ---; 32	Taylor	1919
<i>fulgidus</i> Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
<i>furculigenus</i> Doleschall	--; ---; 148	Oldroyd	1948
<i>fuscipes</i> Taylor	---; ---; 32	Austen	1914

TABLE 1 -- HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS gentilis</i> Erichson	Dry soil and on side of swamp, close to surface under grass; common January, active in sunlight in swampy area; 32°	Fuller	1937
<i>gentilis imminutus</i> Hardy	---; ---; 32	Hardy	1947
<i>geraldi</i> Taylor	---; ---; 32	Taylor	1920
<i>geraldtonensis</i> Taylor	---; ---; 32	Taylor	1926
<i>germanicus</i> Ricardo	---; ---; 32	Ferguson & Hill	1922
<i>gilingilensis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>gregarius</i> Erichson	---; ---; 32	Austen	1914
<i>griseicolor</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
<i>griseiventer</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>griseoannulatus</i> Taylor	---; ---; 32	Taylor	1917 a
<i>griseohirtus</i> Taylor	--; ---; 32	Taylor	1917 a
<i>griseus</i> Taylor	---; ---; 32	Taylor	1919
<i>hackeri</i> Taylor	---; ---; 32	Taylor	1917
<i>herbertensis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>heroni</i> Ferguson	---; ---; 32	Hardy	1944
<i>hilli</i> Taylor	---; ---; 32	Taylor	1926
<i>hubertiensis</i> White	---; ---; 32	Ferguson	1921
<i>illustris</i> Ricardo	---; ---; 148	Oldroyd	1949

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>imperfectus</i> Walker	---; ---; 32	Ferguson	1921a
<i>indefinitus</i> Taylor	---; ---; 32	Ferguson	1921a
<i>indistinctus</i> Bigot	---; ---; 148	Oldroyd	1948
<i>infuscatus</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>innotabilis</i> Walker	---; ---; 32, 268, 283	Mackerras & Rageau	1958
<i>innotatus</i> Ferguson & Henry	---; Dec.-March, in partially cleared area; 32	Ferguson & Henry	1919
<i>insularis</i> Walker	---; ---; 134	Ricardo	1914
<i>insurgens</i> Walker	---; ---; 148	de Meijere	1915
<i>intempestivus</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>ixion</i> Oste-Sacken	---; ---; 148	Kröber	1924
<i>kendallensis</i> Taylor	---; Nov.-March; 32	Ferguson & Henry	1919
<i>kewensis</i> Ferguson &	---; ---; 32	Ferguson & Henry	1919
<i>kurandae</i> Taylor	---; ---; 32	Taylor	1926
<i>lestus</i> de Meijere	---; ---; 148	Schuurmans Stekhoven	1926
<i>laticallidus</i> Ricardo	---; ---; 32	Taylor	1917
<i>latifrons</i> Ferguson	---; ---; 32	Ferguson	1921a
<i>latisegmentatus</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>lenticulatus</i> Oldroyd	---; ---; 148	Oldroyd	1948

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>leucopterus</i> van der Wulp	---; on or near sea coast; 32°	Ferguson & Hill	1922
<i>leveri</i> Mackerras & Rageau	---; ---; 148 ---; ---; 268, 283	Mackerras	1964
<i>lifuensis</i> Bigot	---; ---; 183	Mackerras & Rageau	1958
<i>limbatinervis</i> Macquart	---; ---; 32	Ricardo	1914
<i>lineatus</i> Austen	---; ---; 32	White	1915
<i>lorentzi</i> Ricardo	---; ---; 148	Austen	1914
<i>luciliaformis</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>macquarti</i> Ricardo	---; Nov.-March; 32	Ferguson & Henry	1919
<i>mastersi</i> Taylor	---; ---; 32	Taylor	1917 a
<i>meraukensis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>merionalis</i> Ferguson	---; ---; 32	Ferguson	1921 a
<i>metallicus</i> Ricardo	---; ---; 148	Schuurmans Stekhoven	1926
<i>microdontus</i> Macquart	---; ---; 32	Hardy	1947
<i>milsoniensis</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
<i>milsoni</i> Taylor	---; ---; 32	Taylor	1917 a
<i>minor</i> Taylor	---; ---; 32	Taylor	1926

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>minusculus</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1920
<i>moretonensis</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
<i>muruensis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>musgravii</i> Taylor	---; ---; 32	Taylor	1918
<i>nemopunctatus</i> Ricardo	---; ---; 32	Ferguson & Hill	1922
<i>nemotuberculatus</i> Ricardo	---; ---; 32	Ricardo	1914 a
<i>neobasalis</i> Taylor	Edge of swamp, in soil, never in mud; ---; 32	Fuller	1937
<i>neocirrus</i> Ricardo	---; ---; 32	Hardy	1934
<i>neogermanicus</i> Ricardo	---; ---; 32	Ferguson & Hill	1920
<i>neolatifrons</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
<i>neopalpalis</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1920
<i>nigritanus</i> Walker	---; ---; 32	Ferguson & Hill	1920
<i>nigritarsis</i> Taylor	Submerged stems or leaves of plant at margin of swamp; ---; 32	Hill	1921
<i>nigriventris</i> Macquart	---; ---; 243	Ricardo	1914
<i>notatus</i> Ricardo	---; ---; 32	Hill	1921
<i>obscurilineatus</i> Taylor	---; ---; 32	Taylor	1926
<i>obscurimaculatus</i> Taylor	---; ---; 32	Taylor	1919
<i>obtusipalpis</i> Schuurmans Stekhoven	---; ---; 148	Mackerras	1964

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>ochreoflavus</i> Ferguson & Henry	---; Nov.-March; 32	Ferguson & Henry	1919
<i>ochrothorax</i> Schuurmans Stekhoven	---; ---; 148, 283	Schuurmans Stekhoven	1926
<i>oculatus</i> Ricardo	---; ---; 32	Ferguson & Hill	1922
<i>olivaceus</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>opalescens</i> Schuurmans Stekhoven	---; ---; 148	Oldroyd	1948
<i>orarius</i> English	---; ---; 32	English	1949
<i>pallipennis</i> Macquart	Mud; ---; 32	Ferguson & Hill	1920
<i>palmensis</i> Ferguson & Hill	---; ---; 32	Hardy	1944
<i>palmerstoni</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
<i>palpalis</i> Taylor	---; ---; 32	Taylor	1919
<i>papouinus</i> Walker	---; ---; 148	Schuurmans Stekhoven	1926
<i>puvensis</i> Oldroyd	---; ---; 148	Mackerras	1964
<i>particaecus</i> Hardy	---; ---; 32	Mackerras & Rageau	1958
<i>parvicallosus</i> Ricardo	---; ---; 32	Ferguson & Henry	1919
<i>parvus</i> Strangman	---; ---; 32	Austen	1914
<i>patriarchus</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>pollinosus</i> Ricardo	---; ---; 148	Oldroyd	1948

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>posticus</i> Wiedemann	---; ---; 32	Hardy	1944
<i>postponens</i> Walker	---; Nov.-Feb.; 32	Ferguson & Henry	1919
<i>praepositorus</i> Walker	---; ---; 32	Ferguson & Hill	1922
<i>productus</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>propinquus</i> Macquart	---; ---; 32	Ferguson	1922
<i>pseudoardens</i> Taylor	---; ---; 32	Austen	1914
<i>pseudobasalis</i> Taylor	---; ---; 32	Ferguson	1921a
<i>pseudocallosus</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
<i>pseudopalpalis</i> Ferguson & Hill	---; ---; 32	Ferguson & Hill	1922
<i>quadratus</i> Taylor	---; ---; 32	Ferguson	1921a
<i>queenslandi</i> Ricardo	---; ---; 32	Ricardo	1914a
<i>raffrayi</i> Bigot	---; ---; 148	Schuurmans Stekhoven	1926
<i>rainbowi</i> Taylor	---; ---; 32	Taylor	1918
<i>recusans</i> Walker	---; ---; 148	Oldroyd	1948
<i>regis-georgii</i> Macquart	---; Nov.-March; 32	Ferguson & Henry	1919
	---; ---; 32 ^a	Ferguson	1916
<i>regis-georgii</i> <i>diemenensis</i> Ferguson	Mud of brackish water; ---; 32	Hardy	1947
<i>rivularis</i> Ferguson & Henry	---; ---; 32	Ferguson & Hill	1922

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>robustus</i> Taylor	---; ---; 32	Taylor	1919
<i>russelensis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>rubricallosus</i> Ricardo	---; ---; 32 ---; ---; 183 ---; ---; 219	Hardy Ricardo Williams	1947 1914 1943
<i>rubriventris</i> Macquart	---; ---; 148	Oldroyd	1948
<i>rufinotatus</i> (Bigot)	---; January, Feb., April, June, Sept. and Dec.; 32 Hill ---; ---; 148	Hill Schuurmans Stekhoven	1921 1926
<i>rufoabdominalis</i> Taylor	---; ---; 32	Taylor	1917
<i>samoensis</i> Ferguson	---; taken at 2000 feet, April, May and Nov.; 263	Buxton & Hopkins	1927
<i>sanguinarius</i> Bigot	---; Nov.-March; 32	Ferguson & Henry	1919
<i>selene</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>semicircularis</i> Ricardo	---; at 2000-3000 feet; 148	Schuurmans Stekhoven	1926
<i>sepikensis</i> Oldroyd	---; ---; 148	Mackerras	1964
<i>sequens</i> Walker	---; ---; 32	Ferguson & Hill	1922
<i>serus</i> Walker	---; ---; 148	Oldroyd	1948
<i>siassensis</i> Mackerras	---; ---; 148	Mackerras	1964
<i>sidneyensis</i> Macquart	---; ---; 243	Ricardo	1914
<i>silviformis</i> Taylor	---; ---; 32	Taylor	1919
<i>similis</i> Macquart	---; ---; 32	Ricardo	1914 a

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>sol</i> Schuurmans Stekhoven	---; ---; 148	Schuurmans Stekhoven	1926
<i>spadix</i> Taylor	---; ---; 32	Taylor	1917 a
<i>spatiosus</i> Ricardo	---; ---; 32	Taylor	1919
<i>spoliatus</i> Walker	---; ---; 32	Taylor	1918
<i>strangmanni</i> Ricardo	---; ---; 32	Ferguson	1921 a
<i>stüberi</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>subcohaerens</i> Mackerras	---; ---; 148	Mackerras	1964
<i>subrecusans</i> Mackerras	---; ---; 148	Mackerras	1964
<i>tasmaniensis</i> White	---; ---; 32	Ferguson	1921
<i>taylori</i> Austen	---; ---; 32	Ferguson	1916
<i>tenuis</i> Schuurmans Stekhoven	---; ---; 148	Mackerras	1964
<i>tetralineatus</i> Austen	---; ---; 32	Austen	1914
<i>torresi</i> Ferguson & Hill	---; ---; 32, 148	Ricardo	1929
<i>townsvilli</i> Ricardo	---; ---; 32	Taylor	1919
<i>transversus</i> Walker	---; ---; 33	Ricardo	1914 a
<i>trilinealis</i> Ferguson & Henry	---; Nov.-Feb.; 32	Ferguson & Henry	1919
<i>truncatus</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>trypherus</i> Taylor	---; ---; 32	Taylor	1917 a

TABLE 1 - HORSE FLIES (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TABANUS</i>			
<i>umbripennis</i> Ricardo	---; ---; 32	Mackerras	1959
<i>vanleeuweni</i> Oldroyd	---; ---; 148	Oldroyd	1948
<i>vespiformis</i> Ferguson & Henry	---; ---; 32	Ferguson & Henry	1919
<i>vetustus</i> Walker	---; coastal sand hills, February; 32 ---; coastal sand dunes, inland in open country; 32	White Hardy	1915 1934
<i>victoriensis</i> Ricardo	---; ---; 32	Hardy	1944
<i>wallasi</i> Ricardo	---; ---; 148	Oldroyd	1948
<i>walteri</i> Taylor	---; ---; 32	Taylor	1926
<i>wentworthi</i> Ferguson & Hill	---; ---; 32	Hardy	1944
<i>whitei</i> Hardy	---; ---; 32	Hardy	1947
<i>wynyardensis</i> Hardy	---; ---; 32	Hardy	1916
<i>yulensis</i> von Roder	---; ---; 148	Oldroyd	1948
<i>THEREVIA TABANUS</i>			
<i>viridis</i> Kröber	---; ---; 222	Kröber	1931
<i>THEREVIA PANGONIA</i>			
<i>insolita</i> Mackerras	---; ---; 32	Mackerras	1956
<i>THERIOPLECTES</i>			
<i>bratrankii</i> Nowicki	---; ---; 222	Kröber	1931
<i>difficilis</i> Klöber	---; ---; 222	Klöber	1931
<i>gravis</i> Hutton	---; ---; 222	Klöber	1931

TABLE 1 - HORSE FLIES (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>THERIOPLECTES</i>			
<i>oplus</i> Walker	---; ---; 222	Kröber	1931
<i>pseudobratrankii</i> Krober	---; ---; 222	Kröber	1931
<i>sarpa</i> Walker	---; ---; 222	Kröber	1931
<i>sordidus</i> Walker	---; ---; 222	Kröber	1931
<i>viridis</i> Hudson	---; ---; 222	Kröber	1931
<i>UDENOCERA</i>			
<i>australis</i> Ricardo	---; ---; 32	Taylor	1926

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F. BITING FLIES

Biting flies belong to several families. The tables include only seven species or subspecies.

TABLE 1 - BITING FLIES

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>LYPEROSIA exigua</i> de Meijere	---; seldom bites man; 32°	Handschin	1933
<i>SPANIOPSIS clelandi</i> Ferguson	---; ---; 32°	Ferguson	1915
<i>longicornis</i> Ferguson	---; ---; 32°	Ferguson	1915
<i>marginipennis</i> Ferguson	---; ---; 32°	Ferguson	1915
<i>tabaniformis</i> White	---; occasionally bites man; 32°	White	1915
<i>vexans</i> Ferguson	---; ---; 32°	Ferguson	1915
<i>STOMOXYS calcitrans</i> (Linnaeus)	---; ---; 32° ---; bites in the open, suspected vector of anthrax, infantile paralysis and certain trypanosomae diseases; 107° ---; ---; 134° ---; ---; 222°	Cleland Simmonds Pemberton Miller	1944 1928 1947 1950

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(Abstract used)

G. NON-BITING FLIES

The entries for non-biting flies include representatives of several groups. Of course, the most important species in this category are those that feed as larvae on the flesh or blood of living animals.

The tables include only nine species or subspecies.

TABLE 1 - NON-BITING FLIES

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CEPHALONYIA</i> <i>ovis</i> (Linnaeus)	---; ---; 134*	Herms	1925
<i>CHRYSOMA</i> <i>megacephala</i> (Fabricius)	---; occasionally invade diseased tissues, considered to spread amoebiasis, hookworm and other intestinal infections; 205*	James	1962
<i>MUSCA</i> <i>domestica</i> Linnaeus	---; in houses, common; 263° (Possible vector of conjunctivitis and yaws)	Doane	1914
<i>reticulissima</i> Walker	---; bites man, making persistent attempts to reach the eyes, nose and mouth; 32°	Johnston & Bancroft	1920
<i>scrubrum</i> Wiedemann	---; feeds on open sores or wounds; 220°	Oman & Christenson	1947
	---; common on ulcers and sores, frequently seen feeding on the surface of secondary eruption of yaws of children; 263°	Buxton & Hopkins	1927
<i>terrac-reginae</i> Johnston & Bancroft	---; feed on mucous membranes and sores; 32°	Johnston	1920
<i>ventrosa</i> Wiedemann	---; feed on mucous membrane sores; 32°	Johnston	1920
<i>OESTRUS</i> <i>ovis</i> Linnaeus	---; ---; 222°	Miller	1950
<i>PHAENICIA</i> <i>cuprina</i> (Wiedemann)	---; has been incriminated in human myiasis, potential vector of enteric pathogens; 205	James	1962

TABLE 2 - SUMMARY OF DISEASES OR DISEASE ORGANISMS TRANSMITTED BY
NON-BITING FLIES

SPECIES	DISEASE ORGANISM					DISTRIBUTION
	VIRUS &	PROTOZOA	HELMINTHS	OTHER	:	
<i>CEPHALOMYIA</i> <i>ovis</i> (Linnaeus)				Myiasis		
<i>CHrysomya</i> <i>megacephala</i> (Fabricius)				Myiasis	205	

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H. FLEAS

The entries for fleas include almost no biology. Very few authors deal with flea biology. A few comment on fleas as vectors, but most of the literature deals with taxonomy and hosts. Only when the flea is said to bite man is a host recorded.

The tables include 88 species or subspecies.

TABLE 1 - FLEAS

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ACANTHOPSYLLA</i> <i>endarletini</i> (Wagner)	---; ---; 148	da Costa Lima & Hathaway	1946
<i>franklinensis</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>pavida</i> (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
<i>praxilla</i> Rothschild	---; at 2400 meters; 148	Rothschild	1934
<i>rothschildi</i> (Rainbow)	---; ---; 32	Jordan & Rothschild	1922
<i>rothschildi</i> <i>nereis</i> Jordan & Rothschild	---; ---, 32	Jordan & Rothschild	1922
<i>rothschildi</i> <i>rothschildi</i> Rainbow	---; ---; 32	Jordan & Rothschild	1922
<i>rothschildi</i> <i>victoriana</i> Jordan & Rothschild	---; ---; 32	Jordan & Rothschild	1922
<i>saphes</i> Jordan & Rothschild	---; ---; 32	Jordan & Rothschild	1922
<i>woodwardi</i> (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
<i>ACEDESTIA</i> <i>chera</i> Jordan	---; ---; 32	da Costa Lima & Hathaway	1946
<i>ALAOPSYLLA</i> <i>papuensis</i> Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
<i>BRADIOPSYLLA</i> <i>echidnas</i> (Denry)	---; ---; 32	da Costa Lima & Hathaway	1946
<i>CERATOPHYLIUS</i> <i>fasciatus</i> (Bosc.)	---; rare; 32 (On man, in houses)	Bennetts	1923
<i>gallinae</i> (Schrank)	---; ---; 32°	Seddon	1951

TABLE 1 - FLEAS (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>CERATOPHYLLUS londiniensis</i> Rothschild	---; ---; 32	Jordan & Rothschild	1921
<i>CHORISTOPSYLLA ochi</i> (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
<i>thomasi</i> (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
<i>tristis</i> (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
<i>CTENOPCEPHALIDES canis</i> (Curtis)	---; rare; 32 (On man, in houses) ---; ---; 32° ---; domestic, rare; 197, 203, 205, 245	Bennetts Nicholls Hopkins	1923 1934 1961
<i>felis</i> Bouche	---; common in rts, Nov.; 32 (On man, in houses) ---; ---; 107 ---; ---; 114, 220, 263 (On man) ---; common; 134 ---; Feb., July, Sept.-Oct.; 199 ---; ---; 245, 263 (Bites man) ---; Sept.-Nov.; 281	Bennetts Lever Buxton Pemberton Stewart Hopkins Stewart	1923 1944 1928 1943 1935 a 1961 1935
<i>felis felis</i> (Bouche)	---; ---; 32, 148, 199 ---; ---; 66, 114, 134, 197, 200, 205, 220, 236, 263, 281 (Domestic, readily bites man)	da Costa Lima & Hathaway Hopkins	1946 1961
<i>felis orientis</i> Jordan	---; ---; 50 ---; domestic; 66, 148, 197, 205 ---; ---; 148	Sharif Hopkins da Costa Lima & Hathaway	1930 1961 1946
<i>CTENOPSYLLUS signis</i> (Schonherr)	---; ---; 134	Pemberton	1943
<i>SCIDNOPHAGA ambulans</i> Oliff	---; ---; 32	da Costa Lima & Hathaway	1946

TABLE I - FLEAS (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ECHIDNOPHAGA</i> <i>ambulans</i> <i>inepta</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>aranka</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>cornuta</i> Wagner	---; ---; 32	da Costa Lima & Hathaway	1946
<i>gallinacea</i> (Westwood)	---; ---; 32° ---; ---; 32, 107 ---; ---; 134	Swan Sharif Pemberton	1937 1930 1943
<i>gallinacea</i> <i>gallinacea</i> (Westwood)	---; ---; 107	da Costa Lima & Hathaway	1946
<i>liopus</i> Jordan & Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>macronychia</i> Jordan & Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>myrmecobii</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>perilius</i> Jordan	---; ---; 32	da Costa Lima & Hathaway	1946
<i>GLAUERTIDOS</i> <i>scintilla</i> (Rothschild)	---; ---; 32	da Costa Lima & Hathaway	1946
<i>IDIOCHAETIS</i> <i>illustris</i> Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
<i>ISCHNOPSYLLUS</i> <i>bathylloides</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>caminae</i> (Rothschild)	---, ---; 32	da Costa Lima & Hathaway	1946

TABLE 1 - FLEAS (continued)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ISCHNOPSYLLUS</i> <i>earinus</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>indicus</i> Jordan	---; ---; 197	Hopkins	1961
<i>reductus</i> (Rothschild)	---; ---; 32	da Costa Lima & Hathaway	1946
<i>LEPTOPSYLLA</i> <i>musculi</i> (Schonh)	---; rare; 32 (On man, in houses)	Bennetts	1923
<i>segnis</i> (Schönherr)	---; ---; 32, 222	Cumpston & McCallum	1926 +
<i>LYCOPSYLLA</i> <i>nova</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>MACROPSYLLA</i> <i>hercules</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>NOSOPSYLLUS</i> <i>fasciatus</i> (Bosc-d'Antic)	---; ---; 32 ---; ---; 134 ---; ---; 222	Seddon Pemberton Cumpston & McCallum	1951 1943 1926 +
<i>londoniensis</i> (Rothschild)	---; ---; 32	da Costa Lima & Hathaway	1946
<i>PARAPSYLLUS</i> <i>australiacus</i> Rothschild	---; ---; 32	Jordan & Rothschild	1923
<i>longicornis</i> <i>australiacus</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>taylori</i> Jordan	---; ---; 32	da Costa Lima & Hathaway	1946
<i>PULEX</i> <i>irritans</i> Linnaeus	---; in houses; 32° ---; domestic; 114, 148, 220, 281 ---; Feb.-July, peak May; 134 ---; ---; 134° ---; March, July, October; 199°	Nicholls Hopkins Haas & Wilson Pemberton Stewart	1934 1961 1967 1943 1935 *

TABLE 1 - FLEAS (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>PULEX</i> <i>irritans</i> Linnaeus (cont.)	---; Sept.; 220. ---; in house; 263 (On man) ---; Nov.; 281*	Buxton	1928
<i>simulans</i> Baker	---; Feb.-July, peak May; 134	Haas & Wilson	1967
<i>PYGIOPSILLA</i> <i>colosseus</i> Rothschild	---; ---; 32	Jordan & Rothschild	1922
<i>congrua</i> Jordan & Rothschild	---; Feb., June, July, Aug.; 32	Jordan & Rothschild	1922
<i>gravis</i> Rothschild	---; ---; 32	Jordan & Rothschild	1922
<i>hilli</i> (Rothschild)	---; ---; 32	Jordan & Rothschild	1922
<i>hoplia</i> Jordan & Rothschild	---; June, Aug., Oct.; 32	Jordan & Rothschild	1922
<i>laeviscosa</i> Rothschild	---; ---; 148	Jordan & Rothschild	1922
<i>novaeguinae</i> (Rothschild)	---; ---; 50, 148	da Costa Lima & Hathaway	1946
<i>rainbowi</i> Rothschild	---; ---; 32	Jordan & Rothschild	1922
<i>solida</i> Rothschild	---; ---; 32	Jordan & Rothschild	1922
<i>sethi</i> (Rothschild)	---, ---; 32	Jordan & Rothschild	1922
<i>STEPHANOCIRCUS</i> <i>concinus</i> Rothschild	---; ---; 02	da Costa Lima & Hathaway	1946
<i>dasyuri</i> Skuse	---; ---; 32	da Costa Lima & Hathaway	1946
<i>jarvisi</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>pectinipes</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946
<i>sineoni</i> Rothschild	---; ---; 32	da Costa Lima & Hathaway	1946

TABLE 1 - FLEAS (continued)

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>STEPHANOPSYLLA thomasi</i> (Rothschild)	---; ---; 32	da Costa Lima & Hathaway	1946
<i>STIVALIUS abacetus</i> Jordan & Rothschild	---; ---; 148	Jordan & Rothschild	1922
<i>alticola</i> Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
<i>anaxilas</i> Rothschild	---; at 1500 meters; 148	Rothschild	1934
<i>ancisus</i> Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
<i>corrugis</i> Jordan	---; ---; 148	Jordan	1937
<i>gracilentus</i> Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
<i>lasiurus</i> Jordan & Rothschild	---; ---; 148	Jordan & Rothschild	1922
<i>molestus</i> Jordan	---; ---; 32	da Costa Lima & Hathaway	1946
<i>mordax</i> (Rothschild)	---; ---; 148	Jordan & Rothschild	1922
<i>novaeguineae</i> Rothschild	---; ---; 50, 148	Jordan & Rothschild	1922
<i>papuanus</i> Jordan & Rothschild	---; ---; 148	da Costa Lima & Hathaway	1946
<i>rectus</i> Jordan & Rothschild	---; ---; 32, 148	Jordan & Rothschild	1922
<i>rugatus</i> Jordan	---; ---; 148	da Costa Lima & Hathaway	1946
<i>shawayeri</i> Jordan	---; ---; 148	da Costa Lima & Hathaway	1946

TABLE 1 - FLEAS (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>STIVALIUS</i> <i>spooneri</i> Rothschild	----; at 2000 meters; 148	Rothschild	1934
<i>UROPSYLLA</i> <i>taemanica</i> Rothschild	----; ---; 32	da Costa Lima & Hathaway	1946
<i>XENOPSYLLA</i> <i>cheopis</i> Rothschild	----; common along the coastal parts, July-Sept., Dec.; 32	Bennetts	1923
	----; ---; 32°	Cilento	1940 +
	----; ---; 107 , 134 , 197 , 263 (Bites man, of great importance in plague areas)	Hopkins	1961
	----; Feb., March; 199	Stewart	1935 a
<i>hawaiiensis</i> (Jordan)	----; ---; 134	Pemberton	1943
<i>vexabilis</i> <i>hawaiiensis</i> Jordan	----; vector capacity for plague; 134	Macchiavello	1954
<i>vexabilis</i> <i>meseris</i> Jordan	----; ---; 32	da Costa Lima & Hathaway	1946
<i>vexabilis</i> <i>vexabilis</i> Jordan	----; ---; 32	da Costa Lima & Hathaway	1946

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I. BUGS

The bugs or Hemiptera seem to be uncommon as pests of man in Australia and the Pacific Islands. Two species are listed for this group.

TABLE 1 - BUGS

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>LYSTROCHERUS</i> <i>indicus</i> Stal	---; ---; 32°	Cleland	1944
<i>TRIATOMA</i> <i>rubrofasciata</i> (De Geer)	---; experimentally infected with <i>Trypanosoma</i> crust; 66, 148	Naiva & Lent	1941
	---; bite caused severe pain, swelling and pronounced reddish blotches on the skin of a woman; 13°	Anonymous	1944

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J. URTICATING & VESICATING ARTHROPODS

The entries for urticating and vesicating arthropods are surprisingly few.
Only 13 species or subspecies are listed.

TABLE 1 - URTICATING AND VESICATING ARTHROPODS

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ALLOXACIS</i> <i>flavipes</i> Kono	---; ---; 197*	Farner	1944
<i>ANACA</i> <i>palmarus</i> Zacher	---; ---; 200*	Farner	1944
<i>ANTHELA</i> <i>nicethoe</i> Boisduval	---; cause irritation; 32°	Musgrave	1941
<i>DORATIFERA</i> <i>vulnerans</i> Lewin	Gum tree leaves; ---; 32*	Taylor	1938
<i>EOBIA</i> <i>gigantea</i> Kono	---; ---; 66*	Farner	1944
<i>truckana</i> Kono	---; ---; 66*	Farner	1944
<i>uchiyamai</i> Kono	---; ---; 23°*	Farner	1944
<i>EUPROCTIS</i> <i>edwardsi</i> Newman	---; cause urticating rash; 32° ---; skin irritation and edema of the face and eyelids; 32°	Musgrave Cleland	1941 1920
<i>LEWINIBOMBYX</i> <i>lewini</i> (Lewin-Bombyx)	---; ---; 32°	Musgrave	1941
<i>OCHROGASTER</i> <i>contraria</i> Walker	---; ---; 32*	Berkowitz	1945
<i>SEPINIANIA</i> <i>decor</i> Fairmaire	---; ---; 200*	Musgrave	1941
<i>Impressithorax</i> Pic.	---; ---; 200*	Farner	1944
<i>Licilia</i> Fabricius	---; ---; 200*	Farner	1944

TABLE 2 - SUMMARY OF DISEASES OR DISEASE ORGANISMS TRANSMITTED BY
URTICATING AND VESICATING ARTHROPODS

SPECIES	DISEASE & ORGANISM					DISTRIBUTION
	VIRUS & RICKETTSIA	PROTOZOA	HELMINTHS	OTHER		
<i>ALLOXACIS</i> <i>flavipes</i> Kono				Dermatitis	197	
<i>ANACA</i> <i>palmarus</i> Zacher				Dermatitis	200	
<i>DORATIFERA</i> <i>vulnerans</i> Lewin				Dermatitis	32	
<i>EOBIA</i> <i>gigantea</i> Kono				Dermatitis	66	
<i>truckana</i> Kono				Dermatitis	66	
<i>uchiyamai</i> Kono				Dermatitis	236	
<i>OCHROGASTER</i> <i>contraria</i> Walker				Dermatitis	32	
<i>SESSINANIA</i> <i>decolor</i> Fairmaire				Dermatitis	200	
<i>impressithorax</i> Pic.				Dermatitis	200	
<i>livida</i> Fabricius				Dermatitis	200	

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K. TICKS

The tick entries seldom include information on the immature forms separately from the adults. In fact, most of the entries contain only distributional data.

Ticks are especially important to livestock in Australia; also, some serious human disease organisms are transmitted by ticks. In Table 1 are listed 108 species or subspecies.

TABLE 1 - TICKS

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>AMBLYOMMA acutangulum</i> Neumann	---; 107	Robinson	1926
<i>albolimbatum</i> Neumann	---; 32	Robinson	1926
<i>auruginans</i> Schulze	---; 32	Taylor & Murray	1946
<i>australiense</i> Neumann	---; 32	Robinson	1926
<i>cordiferum</i> Neumann	---; 263	Buxton & Hopkins	1927
<i>cyprium</i> Koch & Neumann	At 3000 feet; 107° ---; 148, 197 ---; 220	Lever Robinson Buxton & Hopkins	1943 1926 1927
<i>cyprium</i> <i>cyprium</i> Neumann	---; 107°, 148°, 197, 220 ---; 205°	Anastos Kohls	1950 1957
<i>helvolum</i> Koch	---; 32, 148	Robinson	1926
<i>limbatum</i> Neumann	---; 32	Robinson	1926
<i>moreliae</i> (Koch)	---; 32	Robinson	1926
<i>nitidum</i> Hirst & Hirst	---; 283	Robinson	1926
<i>papuana</i> Hirst	---; 32	Robinson	1926
<i>postoculatum</i> Neumann	---; 32 ---; 222	Ferguson Fielding	1925 1926
<i>quasicyprum</i> Nuttal, Warburton & Robinson	July; 107	Lever	1943
<i>scaevola</i> Oudemans	---; 148	Fielding	1926
<i>triguttatum</i> Koch	---; 32	Robinson	1926

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>APONOMMA</i> <i>concolor</i> Neumann	Common; 32	Ferguson	1925
<i>decorosum</i> Koch	---; 32	Fielding	1926
	---; 107	Ferguson	1925
<i>ecinctum</i> Neumann	---; 32	Fielding	1926
<i>gervaisi</i> (Lucas)	---; 32	Seddon	1951
<i>hydrosauri</i> Denny	---; 32	Fielding	1926
<i>oudemansi</i> Neumann	---; 148	Taylor & Murray	1946
<i>sphenodonti</i> Dumbleton	Endemic; 222	Dumbleton	1963
<i>trabeatum</i> Schulze	---; 148	Taylor & Murray	1948
<i>trachysauri</i> Lucas	---; 32	Seddon	1951
<i>trimaculatum</i> (Lucas)	---; 32	Anastos	1950
	---; 148	Fielding	1926
<i>ARGAS</i> <i>lagenoplastis</i> Froggatt	---; 32	Fielding	1926
<i>persicus</i> (Oken)	Cracks and crevices in the walls; 32	Ferguson	1925
	---; 32	Fielding	1926
	---; 222	Hoogstraal	1956
<i>vespertilionis</i> (Latreille)	---; 32	Hoogstraal	1956
<i>victoriensis</i> Sweet	---; 32	Fielding	1926
<i>BOOPHILUS</i> <i>annulatus</i> (Say)	---; 205	Kohls	1957
<i>annulatus</i> <i>australis</i> (Fuller)	Grass stems, vegetation and fences; 32	Ferguson	1925

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>BOOPHILUS annulatus</i>	---; 32°	Toumanoff	1944
var. <i>australis</i> Fuller	---; 148	Farner	1943
<i>annulatus</i> <i>microplus</i> Canestrini	Experimental transmission of "Q" fever; 32 Infected with "Q" fever; 32 ---; 32°	Derrick Kohls Andrew et al.	1944 1947 1946
<i>australis</i> (Fuller)	Common during the wet season; 32	Legg	1930
<i>krijgmani</i> Manning	---; 148	Farner	1943
<i>longiscutatus</i> Manning	---; 148	Farner	1943
<i>microplus</i> (Canestrini)	---; 32 ---; 148 ---; 205	Hoogstraal Anastos Kohls	1956 1950 1957
<i>DERMACENTOR atrosignatus</i> Neumann	---; 32 (Host: man)	Farner	1943
<i>auratus</i> Neumann	---; 148	Schulze	1933
<i>HAEMAPHYSALIS australis</i> Neumann	---; 32	Taylor	1913
<i>bancrofti</i> Nuttall & Warburton	---; 32° ---; 32	Andrews et al. Fielding	1946 1926
<i>bispinosa</i> Neumann	Experimental transmission and potential vector of "Q" fever; 32° Experimentally infected with "Q" fever; 32 Probable vector of tropical typhus; 32° Bases of rushes and clumps of rough grass during winter; 32	Derrick Smith Toumanoff Ferguson	1944 1942 1944 1925
<i>bremneri</i> Roberts	---; 219, 222 ---; 32	Anastos Roberts	1950 1963

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>HAEMAPHYSALIS humerosa</i>	Naturally infected with "Q" fever; 32*	Derrick	1944
Warburton & Nuttall	Experimental transmission of <i>Bacillus tropicus</i> ; 32	Heaslip	1940
	All year, bites man experimentally; 32 (Known vector of "Q" fever)	Smith	1941
<i>krijgsmani</i> Kohls	---; 148	Kohls	1948
<i>Lagostrophi</i> Roberts	---; 32	Roberts	1963
<i>leachi</i> Audouin	---; 32, 33	Fielding	1926
	---; 222, 263	Miller	1922
<i>longicornis</i> Neumann	---; 32	Fielding	1926
<i>merauensis</i> Taylor	---; 148	Taylor & Murray	1946
<i>novae-guineae</i> Krijgsman & Ponto	---; 32	Roberts	1963
	---; 148	Farner	1943
<i>papuana</i> Thorell	---; 32	Anastas	1950
	---; 148	Fielding	1926
<i>ratti</i> Kohls	---; 32	Roberts	1963
	---; 148	Kohls	1948
<i>wellingtoni</i> Nuttall & Warburton	---; 148	Schulze	1939
<i>HYALOMMA aegyptium</i> (Linnaeus)	---; 32*	Fielding	1926
	---; 222	Miller	1922
<i>INOCENTOR atrosignatus</i> Neumann	---; 148	Schulze	1933
<i>steini</i> Schulze	---; 148	Taylor & Murray	1946
<i>steini</i> <i>steini</i> Schulze	---; 148	Schulze	1933
<i>IXODES acanthoglossi</i> Lucas	---; 148	Farner	1943

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>Ixodes anatis</i> Chilton	---; 33 ---; 222	Fielding Nuttall	1926 1916
<i>antechini</i> Roberts	---; 32	Roberts	1960
<i>aptericola</i> Maskell	---; 222	Miller	1922
<i>apteridis</i> Maskell	---; 222	Miller	1922
<i>auritulus</i> Neumann	---; 32 ---; 222	Ferguson Nuttall	1925 1916
<i>auritulus sealanicus</i> Dumbleton	---; 222	Dumbleton	1961
<i>australiensis</i> Neumann	---; 32	Fielding	1926
<i>confusus</i> Roberts	---; 32°	Roberts	1960
<i>cordifer</i> Neumann	---; 148	Toumanoff	1944
<i>cornuatus</i> Roberts	---; 32	Roberts	1960
<i>eichhorni</i> Nuttall	---; 50° ---; 148°	Taylor & Murray Fielding	1946 1926
<i>eudyptides</i> Maskell	---; 32, 222	Nuttall	1916
<i>fecialis</i> Warburton & Nuttall	---; 32	Taylor & Murray	1946
<i>fecialis aegrifossus</i>	---; 32	Toumanoff	1944
<i>hiruti</i> Hassall	---; 32	Roberts	1960

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>Ixodes holocyclus</i> Neumann	Capable of transmitting <i>Coxiella burnetii</i> and possible vector of "Q" fever; 32. ---; 148	Seddon	1951
	Naturally infected with "Q" fever, experimentally infected with and experimental transmission of "Q" fever; 32*	Smith	1942
	Causes fatal paralysis of children; 32	Sharif	1938
	Common during spring and early summer; 32	Ross	1924
<i>hydromyidis</i> Swai.	---; 32	Taylor & Murray	1946
<i>intermedius</i> Neumann	---; 222	Miller	1922
<i>jacksoni</i> Hoogstraal	---; 222	Hoogstraal	1967
<i>kohlsi</i> Arthur	---; 32°	Roberts	1960
<i>luxuriosus</i> Schulze	---; 148	Farner	1943
<i>maskelli</i> Kirk	---; 222	Nuttall	1916
<i>mindanensis</i> Kohls	---; 66, 205	Kohls	1957
<i>neumanni</i>	---; 32, 222	Toumanoff	1944
<i>ornithorhynchi</i> Lucas	---; 32	Toumanoff	1944
	---; 197	Taylor & Murray	1946
<i>percavatus</i> Neumann	---; 32	Taylor & Murray	1946
<i>priocnemis</i> Schulze	---; 148	Farner	1943
<i>pteroxylonai</i> Arthur	---; 32	Roberts	1964
<i>putus</i> (Pickard & Cambridge)	Occasionally bites man; 32°	Ferguson	1925
	---; 222	Nuttall	1916
<i>ricinus</i> Linnaeus	---; 33*	Toumanoff	1944
	---; 222	Miller	1922
<i>simplex</i> <i>simplex</i> Neumann	---; 32	Roberts	1960

TABLE 1 - TICKS (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>IXODES</i>			
<i>steini</i> Schulze	---; 148	Farner	1943
<i>tasmani</i> Neumann	---; 32	Seddon	1931
	---; 32°	Roberts	1960
<i>trichosuri</i> Roberts	---; 32	Roberts	1960
<i>trimaculatus</i> Lucas	---; 148	Farner	1943
<i>unicavatus</i> Neumann	---; 32, 222	Ferguson	1925
<i>uriae</i> White	---; 32	Cooley & Kohls	1945
	---; 222	Dumbleton	1961
<i>vespertilionis</i> Koch	---; 32	Nuttall	1916
<i>vestitus</i> Neumann	---; 32	Taylor & Murray	1946
<i>victoriensis</i> Nuttall	---; 32	Taylor & Murray	1946
<i>MARGAROPUS</i>			
<i>annulatus</i>			
var. <i>australis</i> (Fuller)	---; 32	Howard	1908
<i>ORNITHODOROS</i>			
<i>capensis</i> Neumann	---; 32, 197	Hoogstraal	1956
	---; 134. ---; 205°	Kohls	1957
	---; 222	Dumbleton	1961
<i>gurneyi</i> Warburton	Bite cause severe local and systemic symptoms; 32°	Seddon	1951
	Experimentally infected with "Q" fever; 32	Smith	1942
	Experimental transmission of "Q" fever; 32°	Derrick	1944
<i>magnini</i> (Duges)	---; 134	Zimmerman	1944
<i>talaje</i> (Guerin- Meneville)	In houses; 32	Ferguson	1925
	---; 32°	Fielding	1926

TABLE 1 - TICKS (conclusion)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ORNITHODOROS</i> <i>talaje</i> <i>capensis</i> Neumann	---; 32	Kohls	1957
<i>OTOBIAUS</i> <i>magnini</i> Duges	---; 134	Beaumont	1943
<i>RHIPICEPHALUS</i> <i>sanguineus</i> (Latreille)	Experimental transmission and possible vector of "Q" fever; 32°	Derrick	1944
	---; 134°	Pemberton	1943
	---; 263	Doane	1914
<i>sanguineus</i> <i>sanguineus</i> (Latreille)	---; 32°	Hoogstraal	1956
	---; 205	Kohls	1957

TABLE 2 - SUMMARY OF DISEASES OR DISEASE ORGANISMS TRANSMITTED BY
TICKS

SPECIES	DISEASE ORGANISM				DISTRIBUTION
	VIRUS &	:	PROTOZOA	HELMINTHS	
	RICKETTSIA	:		OTHER	
		:	:	:	:
<i>ARGAS</i> <i>persicus</i> Oken				Relapsing fever	32
<i>HAEMAPHYSALIS</i> <i>bispinosa</i> Neumann	Tropical typhus				32
<i>huachuca</i> Warburton & Nuttall	"Q" fever				32
<i>IXODES</i> <i>holocyclus</i> Neumann			Tick paralysis	32	
<i>rubicundus</i> Linnaeus			Tick paralysis	32	

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L. MITES

The entries for mites include a wide variety of species, most of which seldom bite man. For the most part, there are no biological entries. The trombiculid entries are, of course, for larval stages. Most of the others will be for various stages, but mostly for adults.

There are only 69 species or subspecies recorded in the tables.

TABLE 1 - MITES

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ACOMATACARUS australiensis</i> (Hirst)	Jan.-Apr., Sept.-Dec., causes irritating and inflamed swelling; 32° ---; 32 ---; 148 (Host: man, causes dermatitis)	Anonymous Seddon Wharton & Fuller	1946 1951 1952
<i>barrinensis</i> Womersley	---; 32°	Womersley	1945
<i>DEMODEX folliculorum</i> Simon	Common; 32°	Taylor & Murray	1946
<i>DERMANYSSUS gallinae</i> (De Geer)	In houses, occasionally bites man, nocturnal; 32° ---; 134°	Taylor & Murray Pemberton	1946 1943
<i>GLYCYPHAGUS domesticus</i> De Geer	---; 222°	Robertson	1946
<i>LAEELAPS agilis</i> Koch	---; 32°	Strickland	1929
<i>australiensis</i>	---; 32*	Williams	1944
<i>LEEUWENHOEKIA australiensis</i> Hirst	Common; 32° ---; 148°	Gunther Womersley & Heaslip	1941 1943
<i>LEIOGNATHUS bacoti</i> Hirst	Bite at night, wharves, in houses; 32°	Hirst	1914
<i>LIPONYXUS bacoti</i> (Hirst)	---; 32° ---; 32*	Hirst Taylor & Murray	1926 1946
<i>bacoti</i> Berlese	---; 32° In houses, bites cause irritation; 134°	Seddon Zimmerman	1951 1944
<i>ORNITHONYXUS bacoti</i> Hirst	---; 32° (Causes dermatitis)	Williams & Kershaw	1961
<i>PARANCHYGASTIA adia</i> Womersley	---; 32°, 148°	Taylor & Murray	1946

TABLE 1 - MITES (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>PEDICULOIDES</i> <i>ventricosus</i> (Newport)	Common in straw, cotton seed and grain; 32*	Taylor & Murray	1946
	Causes "hay itch" in man; 32°	Swan	1937
	Causes skin eruption; 32°	Seddon	1951
	---; 134*	Pemberton	1943
<i>SARCOPTES</i> <i>scabiei</i> (Linnaeus)	---; 50*	Backhouse	1929
	---; 263°	Marples	1950
<i>scabiei</i> var. <i>hominis</i> (Hering)	---; 32*, 148*	Taylor & Murray	1946
<i>SCHÖNGASTIA</i> <i>blestowei</i> Gunther	---; 32°, 148*	Taylor & Murray	1946
	---; 50°	Gunther	1941
	---; 148°	Womersley & Heaslip	1943
<i>katoris</i> Womersley & Heaslip	---; 236°*	Wharton & Fuller	1952
<i>pusilla</i> Womersley	---; 32°, 148°	Taylor & Murray	1946
<i>schüffneri</i> (Walch)	---; 148 (Host: man, cause dermatitis)	Wharton & Fuller	1952
<i>vandersandei</i> Oudemans	In grass and on low branches or shrubs, causes shrub-itch; 148°*	Ewing & Hartzell	1918
	March, July-Aug., Nov.; 148	Womersley	1952
	---; 148, 283 (Causes dermatitis)	Wharton & Fuller	1952
	Cause scrub-itch; 283°	Dumbleton	1947
<i>TROMbicula</i> <i>abberphara</i> Womersley	---; 32, 148	Womersley	1952
<i>decudellaria</i> Walch	---; 197 (Host: man)	Wharton & Fuller	1952
<i>akomushi</i> (Brumpt)	---; 32, 148 (Bites man, vector of <i>Rickettsia orientalis</i>)	Gelgy & Herbig	1955
	---; 148	Roy & Brown	1954

TABLE 1 - MITES (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TROMBICULA</i>			
<i>alicola</i> Donov	---; 32	Nadchatram & Mitchell	1965
<i>anous</i> (Wharton)	---; 197	Wharton & Fuller	1952
<i>australiensis</i> Hirst	---; 32°	Hirst	1929
<i>buloloensis</i> Gunther	---; 32*, 148*	Taylor & Murray	1946
<i>chiroptera</i> Womersley & Heaslip	---; 32	Womersley & Heaslip	1943
<i>deliensis</i> Walch	Common; 32, 148, 283 (Vector of scrub typhus) Probable vector of K-typhus and apparent vector of "tsutsugamushi" fever; 32 ---; 32*, 148*	Womersley	1952
	---; 32*, 148*	Womersley & Heaslip	1943
	---; 32*, 148*	Taylor & Murray	1946
	---; 32*, 148*	Williams	1944
	---; 32, 148 (Bites man, vector of <i>Rickettsia orientalis</i>)	Geigy & Herbig	1955
	Naturally infected with scrub typhus; 50	Philip & Kohls	1945
	May transmit typhus; 148	Wilcocks	1944
	---; 283 (Host: man)	Wharton & Fuller	1952
	Suspected vector of Tsutsugamushi fever; 289	Ahlm & Lipshutz	1944
<i>densipiliata</i> Walch	---; 50	Womersley	1952
	---; 148	Wharton & Fuller	1952
<i>elegans</i> Womersley	---; 32	Wharton & Fuller	1952
<i>fletcheri</i> Womersley & Heaslip	---; 32*, 148*	Taylor & Murray	1946
	Possible vector of scrub typhus; 148	Kohls	1947
	Tall grass or vegetation, suspected vector of Tsutsugamushi fever; 289	Ahlm & Lipshutz	1944
<i>fritsei</i> Wharton	---; 283	Wharton & Fuller	1952

TABLE 1 - MITES (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TROMBICULA</i>			
<i>gymnodactyla</i> (Womersley & Kohls)	---; 148	Wharton & Fuller	1952
<i>hirsti</i> Sambon	Rotting logs and damp situations in rain forest; 32°, ---; 148°	Taylor & Murray	1946
	Abundant during warm months especially in January in undergrowth beneath tea-trees, bite cause severe irritation; 32°	Hirst	1929
	---; 50°	Dumbleton	1947
	---; 283 (Host: man, cause dermatitis)	Wharton & Fuller	1952
<i>hireti</i> var. <i>buldoensis</i> Gunther	---; 148°	Gunther	1939
<i>incurva</i> Womersley	---; 32	Womersley	1952
<i>keechongi</i> Nadchatram & Mitchell	---; 283	Nadchatram & Mitchell	1965
<i>kohlsi</i> Womersley	---; 148	Womersley	1952
<i>leveri</i> Womersley	---; 107	Womersley	1952
<i>luridbladi</i> Womersley	---; 148	Womersley	1952
<i>lygosomoides</i> Womersley	---; 148	Womersley	1952
<i>minor</i> Berlese	Soil on edges of scrubs; 32°	Seddon	1951
	Common "itch mite" of the scrub, at high altitude of 1,500 feet; 32	Womersley & Heaslip	1943
	---; 32*, 148*	Williams	1944
	---; 148*	Taylor & Murray	1946
	Tall grass or vegetation, suspected vector of Tsutsugamushi fever; 289	Ahlm & Lipshutz	1944
<i>minor</i> var. <i>delicatula</i> Walch	---; 148	Womersley & Heaslip	1943

TABLE 1 - MITES (continued)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TRONBICULA</i>			
<i>mysantha</i> Womersley	---; 32; 148	Womersley	1952
<i>naultini</i> Dumbleton	---; 222	Womersley	1952
<i>nissani</i> Dumbleton	---; 50 ---; 148	Wharton & Fuller	1952
<i>novae-hollandiae</i> Hirst	---; 32	Womersley	1952
<i>obscura</i> Womersley	---; 148	Womersley	1952
<i>philipi</i> Womersley	---; 148	Womersley	1952
<i>pluvina</i> (Wharton)	---; 32, 197, 283	Womersley	1952
<i>quadriense</i> Womersley & Heaslip	---; 32	Womersley	1952
<i>rara</i> (Walch)	Sept.; 32. Aug., Dec.; 148 ---; 148°	Womersley Audy	1952 1950
<i>rioi</i> Gunther	---; 148	Womersley	1952
<i>robusta</i> Gunther	---; 148	Womersley	1952
<i>samboni</i> Womersley	In black soil, chiefly in the top inch, common on warm days, bites are very irritating, bites mostly on the legs, waistline where clothing fits tightly, all year especially from Sept.-Jan.; 32° Common; 32*, 148*	Womersley & Heaslip	1943 1946
<i>surcina</i> Womersley	---; 32*	Wharton & Fuller	1952
	---; 32*	Seddon	1951
<i>scincoides</i> Womersley	---; 93. Dec.-Jan., March, May; 148. July; 283	Womersley	1952

TABLE 1 - MITES (conclusion)

SPECIES	SPECIFIC NOTES; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>TROMBICULA</i> <i>signata</i> Womersley	---; 32	Wharton & Fuller	1952
<i>sobrina</i> Womersley	---; 148	Womersley	1952
<i>thori</i> Womersley	---; 32	Womersley	1952
<i>tovelli</i> Womersley	---; 32	Womersley	1952
<i>translucens</i> Womersley	---; 32	Womersley	1944
<i>vandersandei</i> Oudemans	---; 32*, 148*	Taylor & Murray	1946
<i>walchi</i> Womersley & Heaslip	---; 32*, 148*	Taylor & Murray	1946
<i>wichmanni</i> (Oudemans)	---; 32*, 148*	Taylor & Murray	1946
	---; 32, 148, 283 (Host: man, cause dermatitis)	Wharton & Fuller	1952
	---, 50, 93	Womersley	1952
<i>TYROGLYPHUS</i> <i>longior</i> var. <i>castellanei</i> Hirst	Infesting copra, cause "copra itch" in man; 148*	Taylor & Murray	1946
<i>TYROPHAGUS</i> <i>longior</i> Gervais	---; 222*	Robertson	1946

TABLE 2 - SUMMARY OF DISEASES OR DISEASE ORGANISMS TRANSMITTED BY MITES

SPECIES	DISEASE ORGANISM					DISTRIBUTION
	: VIRUS &	:	PROTOZOA	HELMINTHS	OTHER	
	: RICKETTSIA	:	:	:	:	
<i>ACOMATACARUS australiense</i> (Hirst)					Dermatitis	32
<i>DERMANYSSUS gallinae</i> (De Geer)					Dermatitis	32
<i>GLYCYPHAGUS domesticus</i> De Geer					Dermatitis	222
<i>LAELOPS australiensis</i>	Tsutsu-gamushi				Dermatitis	32
<i>LEIOGNATHUS bacoti</i> Flint					Dermatitis	32
<i>LIPONYSSUS bacoti</i> Hirst					Dermatitis	32
<i>PARASCHONGASTIA dubia</i> Womersley					Dermatitis	32, 148
<i>PEDICULOIDES ventricosus</i> (Newport)					Dermatitis	32
<i>SARCOPTES scabei</i> Linnaeus					Dermatitis	134
<i>scabei</i> var. <i>hominis</i> Raspail					Dermatitis	50
<i>SCHÖNGASTIA blestowei</i> Gunther					Dermatitis	32, 148
<i>katonis</i> Womersley & Heaslip					Dermatitis	236
<i>pusilla</i> Womersley					Dermatitis	32, 148
<i>vanderwaali</i> (Oudemans)					Bush-itch	148

TABLE 2 - MITES (conclusion)

SPECIES	DISEASE ORGANISM					DISTRIBUTION
	: VIRUS &	:	:	:	:	
	: RICKETTSIA	: PROTOZOA	: HELMINTHS	: OTHER	:	
<i>TROMBICULA</i> <i>buloloensis</i> Gunther				Dermatitis	32, 148	
<i>deliensis</i> Walch	Tsutsugamushi				32, 148	(Williams-1944)
<i>fletcheri</i> Womersley & Heaslip				Dermatitis	32, 148	
<i>hirsti</i> Sambon				Dermatitis	32, 148	
<i>minor</i> Berlese	Tsutsugamushi			Dermatitis	32	(Seddon, 1951)
					32, 148	
<i>samboni</i> Womersley				Dermatitis	32, 148	
<i>sarcina</i> Womersley				Dermatitis	32	
<i>vandersandei</i> Oudemans				Dermatitis	32, 148	
<i>walchi</i> Womersley & Heaslip				Dermatitis	32, 148	
<i>wichmani</i> (Oudemans)				Dermatitis	32, 148	
<i>TYROGLYPHUS</i> <i>longior</i> var. <i>castellanei</i> Hirst				Dermatitis	148	
<i>TYROPHAGUS</i> <i>longior</i> Gervais				Dermatitis	222	

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M. MISCELLANEOUS ARTHROPODS

The entries listed as miscellaneous arthropods are mostly for scorpions and spiders. There are 18 species or subspecies listed.

TABLE 1 - MISCELLANEOUS ARTHROPODS

SPECIES	BREEDING HABITS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>ANISOLABIS</i> <i>colossea</i> (Dohrn)	---; ---; 32°	Cleland	1920
<i>ATPAN</i> <i>fornidabilis</i> Rainbow	---; bite causes severe systemic disturbances; 32°	McKeown	1952
<i>robustus</i> Cambridge	---; funnel web spun in natural crevices, nocturnal, bite may be fatal; 32°	McKeown	1952
<i>DECOPHYLLA</i> <i>smaragdina</i> (Fehr)	---; ---; 32°	Cleland	1920
<i>ENTOMOBRYA</i> <i>multifasciata</i> Tull.	---; ---; 32°	Pescott	1942
<i>tenuicauda</i> Schött.	---; ---; 32°	Pescott	1942
<i>HORMURUS</i> <i>australasiae</i> Fabricius	---; ---; 66, 197, 236 (Sting is not poisonous) ---; effect of sting is slight; 263°	Farner	1944
		Buxton & Hopkins	1927
<i>ISOMETRUS</i> <i>europaeus</i>	---; enters house, sting is very painful; 66°, 197°, 200°, 236°	Farner	1944
<i>maculatus</i> (De Geer)	---; ---; 134° ---; effect of sting is slight; 263°	Pemberton	1943
		Buxton & Hopkins	1927
<i>LATRODECTUS</i> <i>hasseltii</i> Thorell	---; common in man-made structures, bite causes severe systemic disturbances, occasionally fatal; 32°. ---; ---; 222	McKeown	1952
<i>mactans</i> Fabricius	---; ---; 134°	Pemberton	1943
<i>MYRMECIA</i> <i>nigiventris</i> Mayr	---; ---; 32°	Cleland	1920
<i>nigrocineta</i> F. Smith	---; painful sting; 32°	Cleland	1920
<i>OCINARA</i> <i>lewinas</i> (Lewin)	---; skin irritation; 32°	Cleland	1920
<i>OECOPHYLLA</i> <i>smaragdina</i> (Fabricius)	---; ---; 32°	Cleland	1920

TABLE 1 - MISCELLANEOUS ARTHROPODS (conclusion)

SPECIES	BREEDING HABITATS; ADULT ACTIVITY; DISTRIBUTION (GENERAL STATEMENTS)	AUTHOR	DATE
<i>PEDICULUS</i>			
<i>capitis</i> (De Geer)	---; ---; 107°	Veitch & Greenwood	1921
<i>humanus</i> Linnaeus	---; ---; 107°	Veitch & Greenwood	1921
<i>PHTHIRUS</i>			
<i>inguinalis</i> Leach	---; ---; 107°	Veitch & Greenwood	1921
<i>pubis</i> Linnaeus	---; on eyelashes of children; 263°	Buxton & Hopkins	1927
<i>SCOLOPENDRA</i>			
<i>morsitans</i> Linnaeus	---; enters houses, bite is extremely painful; 197°	Farner	1944
<i>subspinipes</i> Leach	---; ---; 134°	Pemberton	1943
	---; enters houses, bite is extremely painful; 197°	Farner	1944
	---; readily bites man, bite caused oedema of hand and forearm; 263°	Buxton & Hopkins	1927

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13. ABSTRACT		

The occurrence of insects and other arthropods of medical importance in Australia, New Zealand, New Guinea, and the islands of Oceania is summarized on the basis of a review of most of the available references in the scientific literature. The report includes, for each major group of arthropods, a listing of species and subspecies with biological and distributional data, tabulations of diseases or disease organisms transmitted, and literature citations.

The groups of arthropods included, with the number of species or subspecies in parentheses, are:

Mosquitoes (828), Black flies (58), Sand flies (6), Midges (44), Horse flies (750) Biting flies (7), Non-biting flies (9), Fleas (88), Bugs (2), Irritating and vesicating arthropods (13), Ticks (108), Mites (69), and Miscellaneous arthropods (18).

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Flies	9		6			
Fleas	9		6			
Midges	9		6			
Mites	9		6			
Ticks	9		6			
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